IBM Office Products Division
Customer Engineering

ORIENTATION

Magnetic Tape "Selectric" Composer

Form No. 241-5485-0
March, 1968

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PREFACE

This self-study course provides information concerning MT/SC application, tape preparation, and operation of the MT/SC system. While primarily intended to provide pre-school instruction for Customer Engineers who will be servicing the MT/SC, it may be used by anyone who desires information about the System.

OBJECTIVES

The purpose of this book is to provide you with a basic knowledge of the MT/SC system. It is not meant to be a complete instruction course such as an operator would receive. You will learn, however, how a coded magnetic tape is generated from the author's manuscript, and how this tape is used to produce set copy on the MT/SC system.

At the end of this course you should be able to:

1. Prepare a coded magnetic tape from marked copy to be used on the MT/SC system.
2. Operate the MT/SC system in conjunction with this coded magnetic tape to produce the desired output copy.

In order to reach these objectives, you must learn specific information concerning copy marking, tape preparation, and MT/SC operation. To accomplish this the book has been divided into three sections.

Section I	Applications for the MT/SC
Section II	Copy Marking and Magnetic Tape Preparation
Section III	MT/SC Operation

A test on this material will consist of:

1. Preparing a coded tape from marked copy.
2. Setting up the Composer and giving proper instructions to the MT/SC by way of the control panel so that your coded magnetic tape will cause the MT/SC to produce copy as specified.

SECTION I – APPLICATIONS FOR THE MT/SC

Section I – Learning Objectives

1. Basic capabilities of the MT/SC system as regards output copy.

2. Be able to identify and understand the meaning of the following:

   Flush Left
   Flush Right
   Centered
   Justified
   Dot Leadering

The IBM "Selectric" Composer combines both proportional spacing and single element typing. The Composer is capable of preparing direct image masters or camera ready copy for reproduction. As you recall, justification on the Composer is a semi-automatic operation. The text is typed the first time to collect data in the form of a color and number. This data is then entered into the spacebar value dial and the spacebar quantity dial. The line is typed a second time and justified copy is produced. This, of course, is only one of its capabilities.

Where greater production or storage of the copy on magnetic tape is desirable, the MT/SC system is used. The MT/SC system consists of a magnetic tape reader, a Composer control unit, and a modified Composer used for output. A coded magnetic tape is prepared from the author's manuscript on a modified MT/ST. With this coded magnetic tape containing text and instructional material with the MT/SC system is capable of automatically producing copy in any of the following modes.

1. Justify
2. Flush Left
3. Center
4. Flush Right
5. Dot Leader

Mode is a term used to describe the five basic arrangements of output copy. The following examples show text material output in each of the five modes.

JUSTIFIED COPY

When recording material on magnetic tape you need a way of marking its place so it can be found easily when it is played back on the MT "Selectric" Composer. You will do this by recording a Composer Reference Code.

Output copy in the Justify mode has even left and right margins. On the MT/SC system, the line endings of the output text rarely correspond to those of the input lines.

FLUSH LEFT

Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike over for corrections
Magnetic tape with 24,000 character capacity
Automatic body text composition
Camera-ready output copy

Output copy in the Flush Left mode has an EVEN LEFT MARGIN but an UNEVEN RIGHT MARGIN. Line endings of the output text will ALWAYS correspond to those of the input lines.

CENTERED COPY

Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike-over for corrections
Magnetic tape with 24,000 character capacity
Automatic body text composition
Camera-ready output copy

Output copy in the Center mode has lines centered within a specific area. An equal amount of white space is automatically distributed to the left and right of the typed line. Line endings of the output test will ALWAYS correspond to those of the input lines.

FLUSH RIGHT COPY

Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike-over for corrections
Magnetic tape with 24,000 character capacity
Automatic body text composition
Camera-ready output copy

Output copy in the Flush Right mode has an even right hand margin. White space is inserted to the left of the text to expand the line to a specific length. The right margin is even and line endings of the output text will always correspond to those of the input lines.

DOT LEADERED COPY

. . . . *Hard copy for proofreading*
. . . . *IBM "Selectric" Typewriter touch*
. . . . *Backspace and strike-over for corrections*
. . . . *Magnetic tape with 24,000 character capacity*
. . . . *Automatic body text composition*
. . . . *Camera-ready output copy*

Justify Code . . . .
Flush Left Code . . . .
Center Code. . . . .
Flush Right Code . . . .
Dot Leader Code . . . .

Banking *12*
Business. *18*
Education. *29*
Graphic Arts *72*
Insurance *96*

Output copy in the Dot Leader mode has dots inserted to expand the line to a specified length. The dots may be at the beginning, middle, or end of the line. Line endings of the output text will ALWAYS correspond to those of the input lines.

These five basic modes can be used to provide a wide range of composition variables to fit most requirements that may be encountered. The following examples of composition demonstrate the flexibility available with the IBM Magnetic Tape "Selectric" Composer system.

JUSTIFIED COPY

The Composer is color coded to simplify making machine adjustments. When using a Type Element with a red triangle on the top of it, set the control on the upper left of the machine at red. When switching to a smaller size of type, coded yellow or blue, move the control lever to the color which matches the one on the Element.

To get the feeling of typing on your new IBM "Selectric" Composer, make the following adjustments on your machine. You will not understand the function of all the controls you set, but they will be explained to you soon. For now, just follow the directions as given. You will soon understand how to make the adjustments without help.

FLUSH RIGHT COPY

A Guide to Better Letters
Prepared by International
Business Machines Corporation
New York
Printed in the United States of America

FLUSH LEFT COPY

Cover/Paper Support

The Cover of your IBM "Selectric" Composer is a dual-
purpose feature. When the machine is not in use, the
Cover keeps out dirt and lends an attractive appearance
to the machine. When you begin working, lift the Cover
and it becomes a Paper Support—positioning your
paper in such a way that the material you have typed is
always easily visible and ready to read.

CENTERING AND DOT LEADERING

INTRODUCTION

The Plan of this Book 1

Operating Instructions

Type Element Removal and Replacement 4
  Single Element Concept 4
  Element Identification 4
  Element Lock Lever 4

In this manual, we will discuss the operations necessary to produce copy in each of the five modes. The next section is devoted to copy marking and the preparation of coded magnetic tapes.

SECTION II
COPY MARKING AND MAGNETIC TAPE PREPARATION

SECTION II — Learning Objectives

1. Identify the machines capable of preparing coded magnetic tapes for the MT/SC.

2. Become familiar with the necessary typing techniques with regard to spaces, hyphenated words, line endings, etc.

3. Identify the codes used by the copy marker to give instructions to the recording operator as they apply to the MT/SC.

4. Composer control codes and how they are used to give instructions to the MT/SC system.

5. The steps necessary to record text material for the five basic modes.

THE RECORDING FUNCTION

Recording for eventual playout at the Magnetic Tape "Selectric" Composer is done on a Magnetic Tape "Selectric" Recorder (MT/SR), also called Model V MT/ST. It is a single station, record-only machine, designed especially as a recording unit for the MT/SC system. It has no playback capabilities, since its sole purpose is to record tapes which contain Composer Control codes for playback on the MT/SC.

COMPOSER COMPATIBILITY

Both the Model II and the Model IV MT/ST can be modified to be used as an input unit for the Magnetic Tape "Selectric" Composer. With compatibility changes, the machine is able to produce tapes which can be played back on the MT/SC.

In using a regular MT/ST, you controlled the output, or playback, copy by recording instructions on the tape. These instructions were recorded by depressing the buttons on the Tape Console.

On the MT "Selectric" Composer, the arrangement of the output copy is also controlled by codes recorded on tape. However, Composer Codes are recorded by a sequence of typewriter keyboard functions. Therefore, the MT/ST used as a part of your MT/SC system has been altered so that it will function in the same way as an MT "Selectric" Recorder (MT/SR).

To meet the requirement of hard copy compatibility, the MT/SR Element and red-black ribbon must be used when preparing tapes for the MT "Selectric" Composer. Some characters have been relocated and some added to the Composer keyboard to meet the needs of the graphics industry more exactly.

A Model IV MT/ST modified for Composer compatibility can be used for graphics applications in several ways. In addition to preparing coded copy, it can be used to:

Prepare codeless copy
Revise codeless copy
Convert codeless copy to coded copy
Update coded copy

Each of these operations will eventually lead to a finished magnetic tape which will be played back on the MT "Selectric" Composer to produce copy ready for reproduction.

Composer compatibility features do not interfere with ordinary MT/ST operation. Instead, you can use your Model IV in two ways: as a regular MT/ST and as an input unit for the MT/SC.

GRAPHICS CONTROL SWITCH

The Graphics Control Switch changes the operation of your Model IV from a regular MT/ST to an input unit. It has two positions: MT (MT/ST) and GR (Graphics). (Fig. 2)

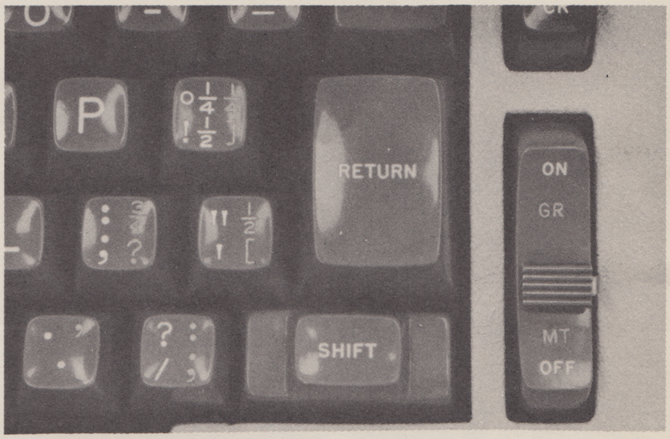


FIGURE 2 – GRAPHICS CONTROL SWITCH

To use your Model IV as a regular MT/ST, place the Graphics Control Switch in the MT (lower) position. Your machine will then function as a regular MT/ST. The coding buttons on the Tape Console will be active. The Prefix Key will not be active.

To use your Model IV as an input unit, place the Graphics Control Switch in the GR (upper) position. Your machine will then function as an input unit. The Prefix Key will be active. When it is depressed, a Prefix Code will record on tape and cause the next typed character to print in red. This red character will represent a code. Although the Tape Console buttons which control tape movement are not affected, the CODING BUTTONS used for regular MT/ST functions WILL NOT BE ACTIVE. All codes will be entered at the typewriter by striking an alphabetic character.

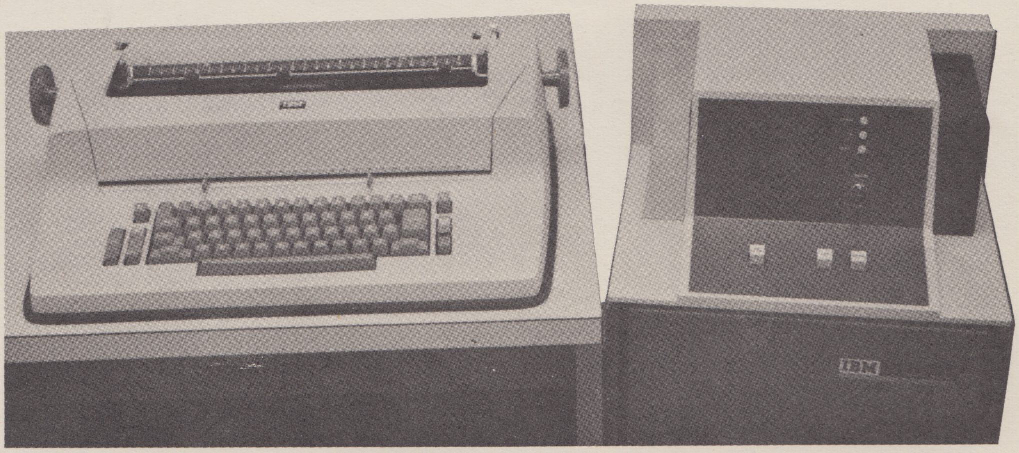


FIGURE 1 – MODEL V MT/ST

PREFIX KEY

The Prefix Key is located to the left of the Tab Set/Clear Control. When the Prefix Key is depressed, a Prefix Code is recorded on tape and the ribbon mechanism is shifted to the red position. (Fig. 3)

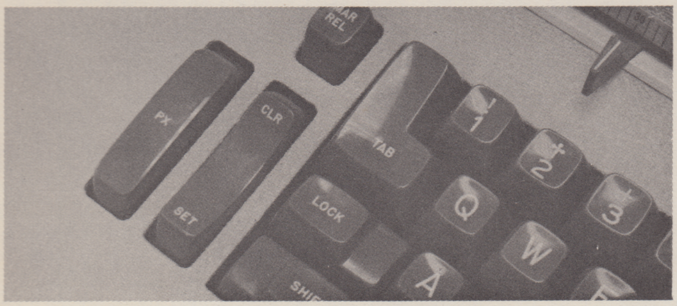


FIGURE 3 – PREFIX KEY

The Prefix Code is the INITIAL STEP in recording MT/SC Codes and sets up the machine to receive code characters which print in red on the hard copy. The ribbon then reverts to the black position. The Prefix Code itself does not print on the hard copy (paper) but does record on tape and causes the next character to print in red. (Code characters also print in red if you play back or transfer the tape with your MT/ST set for Graphics).

Remember, the Prefix Key will only be active when the Graphics Control Switch is set at GR (Graphics).

NUMBER ONE

The MT/SR Element has the number one (1) located on the top row, with the other number. Never use a lower case "l" for the numeral one. On the MT "Selectric" Composer all characters are proportionally spaced. Numbers are 6 units wide, whereas the lower case "l" is a 3-unit character.

UNDERSCORE

There is no underscore on your MT/SR Element. This character has been replaced with the em dash. Underscoring is generally hand ruled on the finished copy.

KEYBOARD ARRANGEMENT

One of the differences between the MT/ST and the MT/SC is the keyboard arrangement. On the MT "Selectric" Composer, some of the 88 standard keyboard positions have been changed to meet the needs of the graphic arts industry.

Since your Model IV will be used as an MT/ST as well as an input unit for the MT "Selectric" Composer, special keytops have been provided to show both keyboard arrangements.

STANDARD KEYBOARD ARRANGEMENT

The white characters on the keytops show the standard keyboard positions and correspond to standard typing elements.

COMPOSER KEYBOARD ARRANGEMENT

The red characters on the keytops show the character arrangement of the MT "Selectric" Composer. These characters correspond with the MT/SR Element. (Fig. 4)

EM DASH

The dash (often referred to as as em dash) is the shift position for the hyphen. It looks like a hyphen but is longer.

Use the em dash in clauses and other instances where a dash is generally used to set off text. DO NOT use two hyphens or a "space-hyphen-space" sequence.

QUOTATION MARKS

Left and right single quotation marks are the upper case position of the comma and period respectively.

To type regular quotation marks, type two single quotation marks each for the left and the right.

APOSTROPHE

To type an apostrophe, use the shift position of the period.

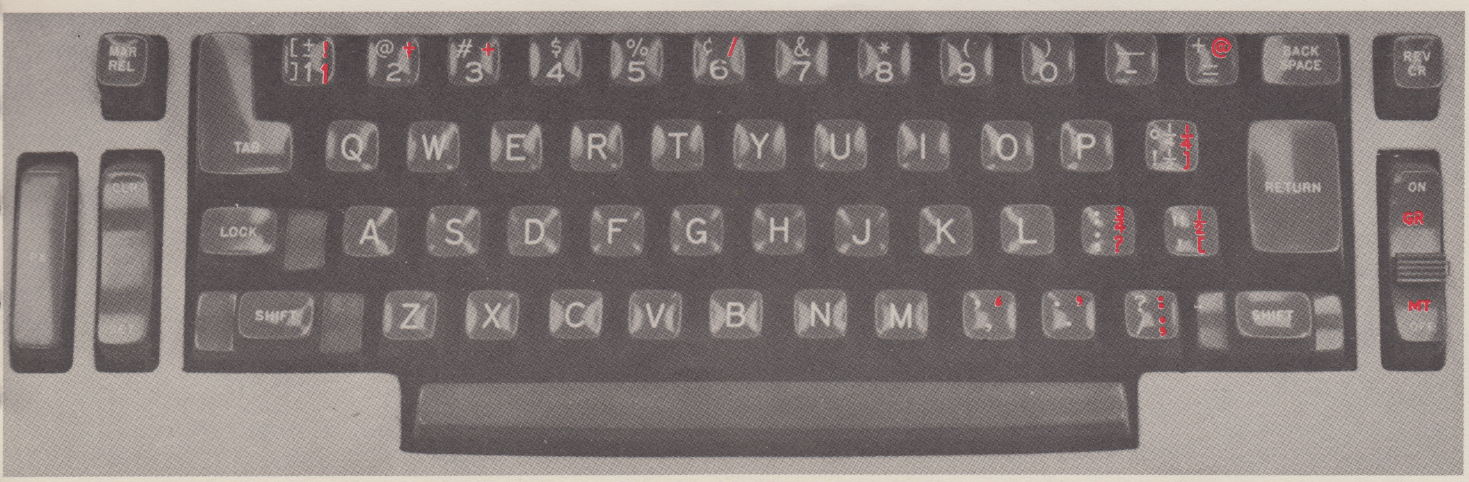
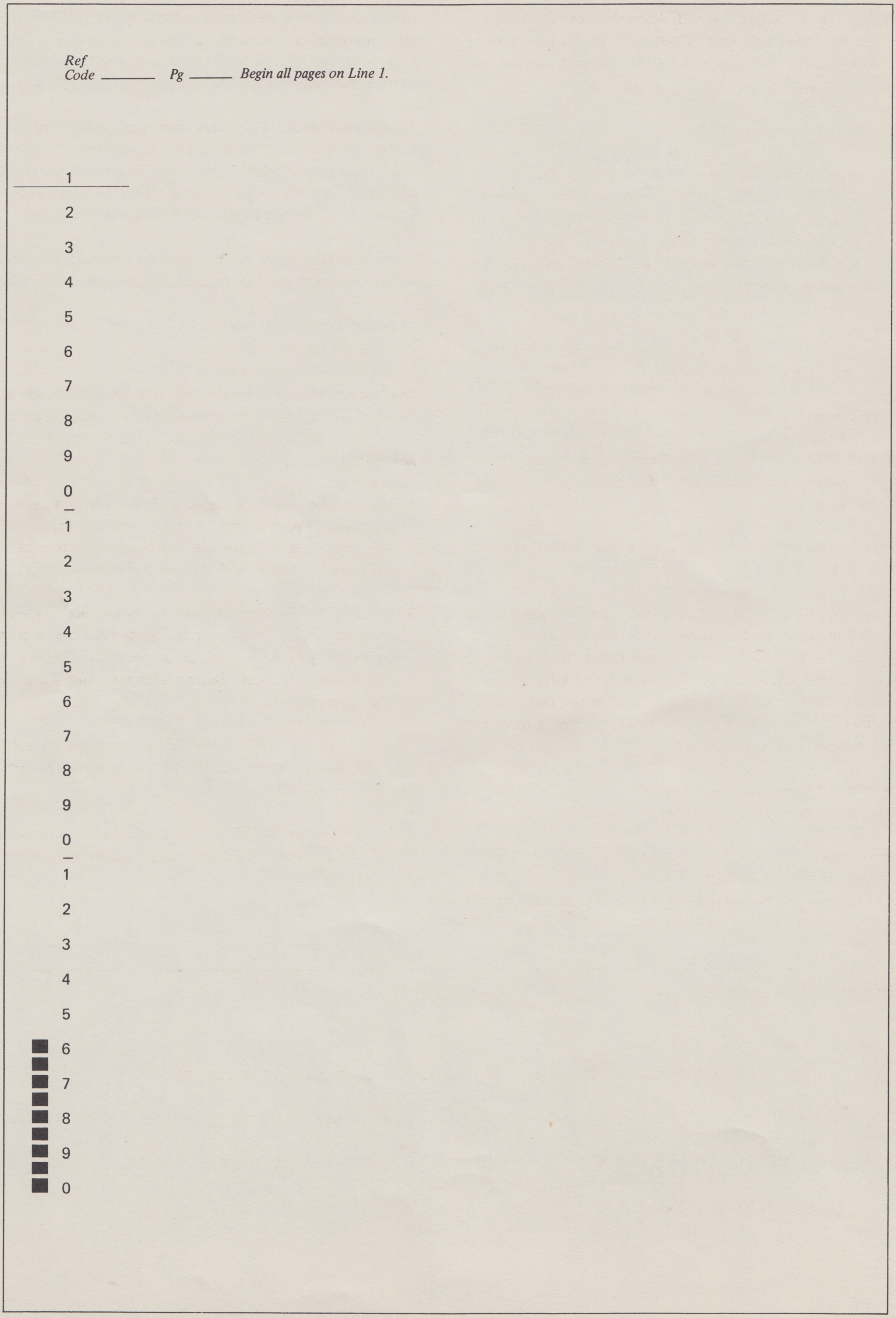


FIGURE 4 – KEYBOARD ARRANGEMENT

EXAMPLE OF PRE-NUMBERED PAPER



Ref
Code ______ *Pg* ______ *Begin all pages on Line 1.*

1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
■ 6
■ 7
■ 8
■ 9
■ 0

CODED COPY

Coded copy is material recorded especially for playback on the Magnetic Tape "Selectric" Composer. In addition to the text material, the tape and the hard copy will include the Composer codes which control output copy.

PRENUMBERED PAPER

The MT/SC identifies and counts each line of typed copy, or input line, by the recorded Carrier Return. So that each input line can be identified easily by its correct number, the recorded material should always be prepared on prenumbered paper. Then, if it is necessary to prepare a Correction Tape, each line to be changed or corrected can be "addressed" by its exact line number.

The need for a correction tape and how this tape is generated will be explained later in this section.

PREFIX CODE

The Prefix Code sets up the MT "Selectric" Composer to receive the special codes which control the arrangement of the output copy.

A Prefix Code is actually the same bit configuration as a MT/ST Stop Code.

To record a Prefix Code, depress the Prefix Key. In addition to recording the Prefix Code, depressing the Prefix Key automatically locks the keyboard and shifts the ribbon mechanism to the red position. When the key is released, the keyboard will unlock, but the typewriter ribbon remains in the red position until a character is recorded. After one character is recorded (and printed), the ribbon shifts back to the black position.

If the preceding copy is in all capitals and the Shift Key is locked, depressing the Prefix Key will unlock the shift.

The Prefix Code records on tape but does not print on the hard copy. The code character which will follow the Prefix Code prints in red. A Prefix Code must precede every code character. Two or more Prefix Codes cannot be recorded in succession.

REFERENCE CODE

Remember, when recording material on magnetic tape you need a method of marking its place. You will continue to do this by recording a Reference Code; however, when recording for the MT/SC, you will record a Composer Reference Code.

A Composer Reference Code recorded on tape consists of a Prefix Code (MT/ST Stop Code), the letter x, then a normal MT/ST Reference Code. (15 Auto Search Codes, 15 Search Bits, 30 Check Bits, and 1 Carrier Return Code). Therefore, a Composer Reference Code actually contains 63 codes.

When your Model IV MT/ST is set for Graphics operation, the Reference Code must be recorded by this two-step procedure:

1. Depress the Prefix Key.
2. Type the letter "x".

The Composer Reference Code will always appear as a red "x" on your paper. (See example below.) In addition to printing a red "x", the Composer Reference Code differs from an MT/ST Reference Code in other ways:

1. You do not need to record a Stop Code before it. If you play back at your Model IV (either in Play, Adjust, or Transfer) with your machine set for Graphics, the machine will stop when it comes to a Composer Reference Code.

2. After the machine has stopped, you have the option of skipping or searching past the Reference Code to resume playback—just as you did on a regular MT/ST. However, if you depress the Start Button without doing either, you get the following results.

   a. In Play or Adjust, a red "x" will print, the machine will SKIP the Reference Code, and playback will resume automatically.

   b. In Transfer, a red "x" will print, the Composer Reference Code will transfer, and playback will resume automatically.

COMPOSER REFERENCE CODE

1xWhen recording material on magnetic tape you need a way of marking
2its place so it can be found easily when it is played back on the
3MT "Selectric" Composer. You will do this by recording a Composer
4Reference Code.
5
6s,

3. If your machine should inadvertently be set for MT, playback will stop at a Composer Reference Code except in Transfer. If you depress the Start Button, the same things happen as when an MT/ST reads a regular MT/ST Reference Code, except the action is preceded by the printing of a black "x".

   a. In Play or Adjust, a black "x" will print and the machine will go into an auto search operation.

   b. In Transfer, a black "x" followed by 2's and z's, will print as the Reference Code transfers.

GUIDES FOR RECORDING A REFERENCE CODE

- Upon loading the tape, record a Reference Code at the first recording position.

- Record Reference Codes to identify pages for ease of location at the output unit.

- Record a Reference Code only on Line 1 of the prenumbered paper.

- DO NOT record a Carrier Return after a Reference Code on an original tape. (A Reference Code followed by a Carrier Return would produce a blank line on the output copy.)

- Handwrite the Reference Code number in the left margin.

RECORDING PROCEDURES

TO BEGIN A PROJECT

To identify each project and each line within a project, always begin recording with a Reference Code on Line 1 of each prenumbered page.

1. Manually insert paper and position at Line 1.

2. Record a Reference Code after loading the tape and handwrite the number in the left margin.

3. Begin typing on Line 1.

TO END A PROJECT

So that printing at the output unit will stop after the last line of a project, follow the procedure outlined below. The procedure includes recording a Composer Stop Code (consisting of a Prefix Code, a letter "s" and a comma) which stops playback.

1. Record two Carrier Returns.
2. Depress the Prefix Key.
3. Type the letter "s".
4. Type a comma.
5. Carrier return.
6. Unload tape and remove paper. Label the Tape Cartridge to correspond with the project.

REVIEW OF GENERAL TYPING INSTRUCTIONS

Some traditional typing procedures do not apply to recording copy for the MT "Selectric" Composer. Thus, general typing instructions unique to recording for the MT/SC are a part of training for recording operators.

TABULATION

Tabs must be used for paragraph indentation when recording for justified copy.

Tabs are to be used only when indicated on the marked copy.

SPACES

Only one space should appear after a period, comma, semicolon, or other punctuation mark. If in recording for justified copy a second space is added at the end of a sentence, the Output Unit will ignore it, since printed materials generally use only one space at the end of a sentence.

No spaces are to be used for paragraph indentations unless required by a unique layout design.

Unless specifically marked, spaces are not to be added:

- before or after a Carrier Return

- at the end of a sentence ending a line

- before or after a Reference Code

- before or after a tab

- before or after an em dash.

HYPHENATED WORDS

Words are never to be hyphenated at the end of a line when recording for justified copy.

Words such as mother-in-law, No. A-890, etc., are typed as usual; however, the complete word must be typed on one line. When recording for nonjustified copy, follow the lines exactly as they are marked.

LINE ENDINGS

When recording for justified copy, line endings as they appear on the original copy are disregarded. Typing continues to the right margin.

For nonjustified copy, lines are typed exactly as they appear on the original copy unless they are marked to end otherwise.

PARAGRAPH IDENTIFICATION

Paragraphs are identified as in regular typing.

Flush paragraphs—all lines beginning at the left margin—are separated by two or more Carrier Returns.

Indented paragraphs—the first line beginning farther from the left margin than the other lines—are separated by a Carrier Return/Tab combination or multiple Carrier Returns and a Tab.

CARRIER RETURNS

When recording for justified copy, multiple Carrier Returns are recorded only when specified or when needed to indicate paragraph beginnings. When recording for other types of copy, only specified Carrier Returns are to be recorded.

Depressing the Carrier Return button on the Model V MT/SR unit causes only a Carrier Return code to be recorded on the tape. A Model IV MT/ST will cause a Carrier Return/Feed Code combination to be recorded on the tape. Therefore, when corrections are necessary in the beginning of a line, the LINE RETURN button should be used on both units.

DEFINITION OF TERMS

Certain terms, characteristic of the IBM Magnetic Tape "Selectric" Composer, will be used throughout the remaining parts of this manual. They are defined below as they relate to this particular system.

MODE

Mode is the term used to describe the five basic arrangements of output copy.

The five modes are:

JUSTIFY
FLUSH LEFT
CENTER
FLUSH RIGHT
DOT LEADERED

Output copy in the Justify Mode has even left and right margins. Output line endings rarely match those of input lines.

Output copy in the Flush Left Mode has an even left margin, but an uneven right margin. Output and input line endings are identical.

Output copy in the Center Mode has lines centered within a specific area. An equal amount of white space is automatically distributed to the left and right of the printed line. Text of output lines is identical to that of input lines.

Output copy in the Flush Right Mode has an even right margin. White space is inserted to the left of the text to expand the lines to a specific length. Text of output lines is identical to that of input lines.

Output copy in the Dot Leader Mode has dots inserted to expand a line to a specified length. The dots may be at the beginning, middle, or end of a line. Text of the output lines is identical to that of the input lines.

LINE

A line is distinguished as being an input line or an output line.

An input line is the segment of text recorded between two Carrier Returns on the record unit. The text of an input line corresponds exactly to that printed on a single line of the prenumbered paper.

An output line is the segment of text printed out between two Carrier Returns from the Composer printer. In Justify Mode, output lines have no relation to input lines. By contrast, in all nonjustify modes, text of output lines is identical to that of input lines.

FIELD

How the output copy prints out is dependent upon the placement of codes when the information is recorded on the tape. To help identify where these codes should be placed, text is broken up into segments called fields. In the Justify mode, a field is a paragraph. A paragraph is identified by one of the following combinations of codes:

Carrier Return/Tab
Carrier Return/Carrier Return (any number of
carrier returns)
Carrier Return/Mode Code

In nonjustify modes (flush left, center, flush right, or dot leader), a field is a line defined by a carrier return. In tabular material, a field is any line of a column defined by a tab or carrier return. Once these fields are identified, it is easier to see how codes will affect the output copy and where they should be placed to cause the proper end results. The exact spot in a field that a code should be entered, cancelled or replaced by another code becomes more apparent.

MEASURE

Measure is the term used to define output line length. The Measure refers to the number of units contained in a line.

MARGINS

The left margin is set at the output printer. For purposes of determining measure, left margin may be defined in one of two ways, depending on the nature of the text to be recorded.

For nontabular text, the left margin is defined by the position of the Left Margin Set.

For tabular projects, each column (or field) has a left margin which is defined by the tab stop set for that column. A different measure may be used for each column (field).

The right margin is controlled by the measure in all modes except Flush Left. (In flush left copy, the right margin is determined by your marked line endings.)

In no case is it necessary for the output operator to establish a right margin with the Right Margin Set on the output printer.

INDENT

Line Indent is the term used to describe the number of units of white space to appear between the left margin and the left edge of the text. A line indent temporarily reduces the unit length of the output line by moving the left margin of the text to the right a specified number of units; however, the measure is not changed. (In tabular work, remember, the left margin refers to the beginning of a column as defined by a tab stop.)

Paragraph indent refers to the number of units of white space resulting from a tab recorded at the beginning of a paragraph when in Justify Mode. On the output copy, the recorded tab is converted to the unit value entered from the Control Panel. A paragraph indent affects only the first line of a justified paragraph.

In the nonjustify modes, recorded tabs are read as tabs, and the Carrier moves to the tab stops set on the output printer.

COMPOSER CONTROL CODES

Composer Control Codes is the general classification of all the recorded codes which affect output copy.

Mode Codes make up one group of the Composer Control Codes. They are instructions recorded on tape to control the arrangement of output copy. All Mode Codes are represented by a single alphabetic character which appears in red on the record copy. The five Mode Code characters are:

```
j or J for Justify
l or L for Flush Left
c or C for Center
r or R for Flush Right
d or D for Dot Leader
```

The mode may be recorded on tape or entered at the Control Panel of the output unit. The arrangement of the output copy is controlled by the last mode entered and remains unchanged until another mode is read from the tape or keyed in at the Control Panel.

Format Codes are a second group of Composer Control Codes. They are instructions recorded on tape to control line length of the output copy for Justify, Flush Right, Center, and Dot Leader Modes. Format Codes are represented by a single alphabetic character followed by a unit value and a comma. Although all characters from the code character up to and including the comma make up the code, only the code character itself will appear in red on the record copy. The Format Code characters are:

```
m or M for Measure
i or I for Indent
```

Measure and Indent instructions may be recorded on tape or entered at the Control Panel of the output unit. The line length of the output copy is controlled by the last value entered and remains unchanged until another value is read from the tape or keyed in at the Control Panel.

A few additional codes complete the Composer Control Codes.

An Address Code is used only on a Correction Tape and is always followed by a line number and a comma, or a comma only. Since this code is used in making corrections after the original recording is completed, no layout decision is required concerning Address Codes. The Address Code must be recorded on tape; it cannot be entered at the Control Panel.

A Fixed Space Code is used in the Justify Mode to control the unit value of a space. Remember, the output unit justifies output copy by expanding spaces between words. A recorded Fixed Space Code, however, "fixes" a space at 3 units. A "fixed space" will not be expanded. The Fixed Space Code, which is represented by a red comma (,) on the record copy, must be recorded on tape; it cannot be entered at the Control Panel.

All Composer Control Codes appear in red on the recording operator's hard copy; however, they do not print on the output copy. And, with one exception, they do not stop printing. This exception is the recorded Stop Code. A Stop Code is always recorded preceding an instruction which requires the output operator to make manual adjustments. In addition, a Stop Code ends each project. The Stop Code, which is represented by a red "s" on the record copy, must be recorded on tape; it cannot be entered at the Control Panel. The Stop Code or the Stop Code and instruction is always followed by a comma.

All of the Mode Codes, Format Codes, and additional Composer Control Codes are recorded simply by depressing a typewriter character. However, to make the character a Composer Control Code, it must be preceded by a Prefix Code. Depressing a special Prefix Key on the recorder typewriter keyboard records a Prefix Code on tape, and the ribbon mechanism is shifted to red so that the code character appears in red on the hard copy. The Prefix Code does not print on the hard copy, but the red code character indicates that a Prefix Code was recorded.

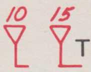
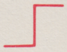
MARKING THE COPY

In addition to any standard proofreader's marks used the following marks are recommended for the MT/SC:

ⓙ	Justify Code
ⓛ	Flush Left Code
ⓒ	Center Code
ⓡ	Flush Right Code
ⓓ	Dot Leader Code
ⓓ //	Repeat code on every line
ⓜ---,	Measure Code (See note below)
ⓘ--,	Indent Code
ⓘ,	Indent Cancel Code
ⓢ,	or
ⓢ---,	Stop Code
(,)	Fixed Space Code
ⓧ	Reference Code
ⓐ--,	or
ⓐ,	Address Code

The Control Codes are circled as a reminder to the recording operator that a Prefix Code must precede this character on the tape. Either upper or lower case letters may be recorded.

Other useful marks include:

CR	Carrier Return
10 15 	Tab
$\frac{S}{P}$	Space (Record operator will space once for each)
[ ]	Notes in brackets will not be recorded.
	Line Ending

NOTE: The dashes (---) in this manual indicate that a number or an instruction must be recorded between the code character and the comma.

ADDITIONAL COPY MARKING CODES

Information above this symbol is to be recorded on the same line as the text. ∧

EXAMPLE OF MARKED COPY

ⓙ ⓜ 288,

∧When an Indent Code is recorded in the middle of a paragraph, only those lines which print after the code has been read will be indented. Since output lines of justified copy rarely match input lines, it is difficult to record the Indent Code in a position to assure that an exact number of lines is indented.

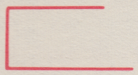
EXAMPLE OF RECORDED COPY

```
1xjm288,When an Indent Code is recorded in the middle of a paragraph,
2only those lines which print after the code has been read will be
3indented. Since output lines of justified copy rarely match input
4lines, it is difficult to record the Indent Code in a position to
5assure that an exact number of lines is indented
6
7s,
```

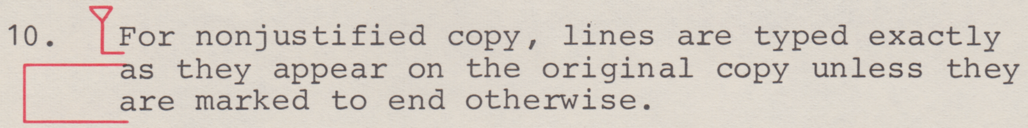
EXAMPLE OF OUTPUT COPY

When an Indent Code is recorded in the middle of a paragraph, only those lines which print after the code has been read will be indented. Since output lines of justified copy rarely match input lines, it is difficult to record the Indent Code in a position to assure that an exact number of lines is indented.

Information between the upper and lower portion of these brackets will be typed at the left margin. DO NOT TAB.



EXAMPLE OF MARKED COPY



10. For nonjustified copy, lines are typed exactly
as they appear on the original copy unless they
are marked to end otherwise.

A tab is recorded only for the first line, the second and third lines are recorded starting at the left hand margin.

EXAMPLE OF RECORDED COPY

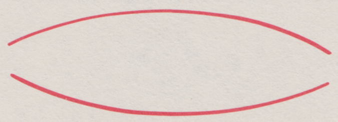
810.   For nonjustified copy, lines are typed exactly

9as they appear on the original copy unless they are

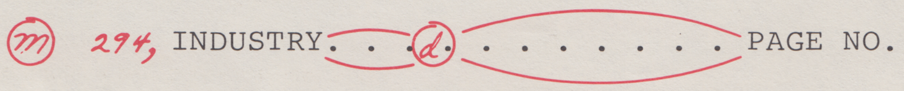
0marked to end otherwise.

—

These are "close up" marks. They tell the recording operator to record the text or codes following these marks immediately after the text or codes preceding the marks. Do not record the dots or spaces enclosed by the close-up marks.



EXAMPLE OF MARKED COPY



ⓜ 294, INDUSTRY. . . ⓓ. . . . . PAGE NO.

EXAMPLE OF RECORDED COPY

```
1xm294,INDUSTRYdPAGE NO.

2
```

EXAMPLE OF OUTPUT COPY

INDUSTRY . . . . PAGE NO.

TAB SETTINGS FOR THE RECORDING OPERATOR

Before you communicate tab settings, bear in mind that for every tab in the output copy there must be a corresponding tab recorded as input on the magnetic tape. The recording operator will need an indication as to where she must set tabs for the input copy. A number above each of the tab symbols 10 will instruct her that a tab is to be set that number of spaces from the left margin. (Specify spaces instead of actual scale positions, because you do not know where her left margin is set.)

The typewriter printing scale at the recording station will be one of two basic typewriter escapements—10 spaces to one inch or 12 spaces to one inch.

If the symbol 10 appears on your marked copy, the recording operator will set a tab 10 spaces from the left margin. (See example below.)

Remember when planning tabs to allow space for codes and other instructions that will be typed in.

TAB SETTINGS FOR THE OUTPUT OPERATOR

Your layout design will determine where tabs are to be set on the output printer. The printing scale on the Composer is marked in picas. Tabs can be set only on whole pica marks.

A recorded tab will be recognized when the Carrier is as close as four units to the next output tab stop. If the last printed character before a tab is less than 4 units from that output tab stop, the Carrier will by-pass that tab stop and print at the following tab stop.

Generally, the numbers for tab settings for output copy will be indicated on a Layout information sheet.

These numbers will indicate number of picas from the left margin. For example, if settings are given as 2, 8, 14, and 20, the output operator will locate and set tab stops at a position 2 picas from the left margin, 8 picas from the left margin, etc.

In some cases, tabs may be marked for the output operator in a manner similar to that for the recording operator. The symbol 4 on copy for the output operator will indicate that a tab is to be set 4 picas from the left margin.

JUSTIFY

Justified copy is output copy with even left and right margins. On the output unit, the copy is justified by expanding the spaces between words whatever amount is required to make all lines end exactly at the right margin. Instead of setting margins on the output unit, line length of output copy is determined by a unit value which is called "measure". You will soon learn to record this on tape. (The measure may also be entered by the MT/SC operator at the output control panel.)

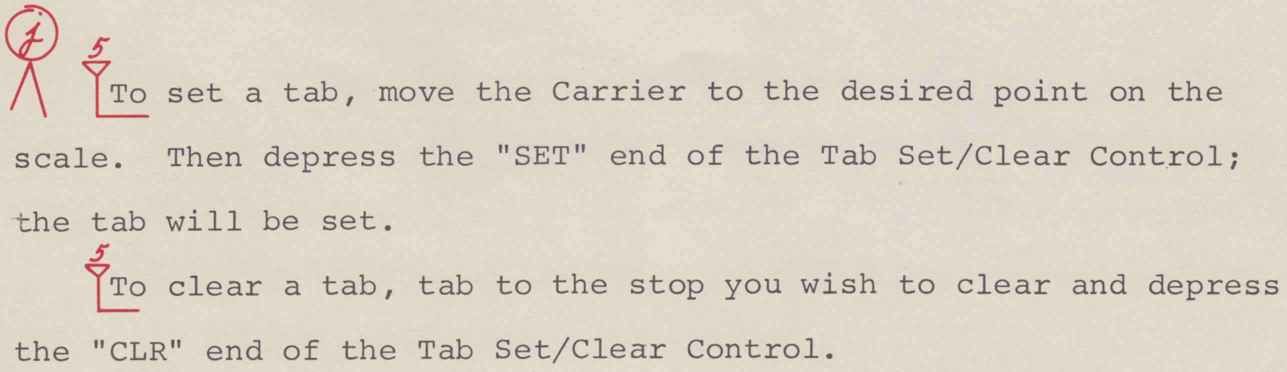
Code Placement

The Justify Code must be recorded at the beginning of a field. Remember, a Mode Code remains stored in the machine until a new one is entered. Therefore, if the Justify Code does not appear at the beginning of the paragraph, all copy up to the point where the Justify Code is recorded would be printed out would be printed out according to whatever mode was already in the machine.

Steps to Record a Justify Code

1. Record a Prefix Code.
2. Type the letter "j".
3. Begin typing text copy.

EXAMPLE OF MARKED COPY



ⓙ 5 To set a tab, move the Carrier to the desired point on the scale. Then depress the "SET" end of the Tab Set/Clear Control; the tab will be set.

5 To clear a tab, tab to the stop you wish to clear and depress the "CLR" end of the Tab Set/Clear Control.

Guides to Recording for Justified Copy

- Carrier return only after a complete word. Recorded line endings will be ignored, since the MT/SC creates its own line endings for justified copy.
- Do not hyphenate words at the end of a line.
- Do not record an em dash at the end of a line.
- Do type words, such as mother-in-law, where the hyphens are part of the word, all on one line.
- Tab one time only for paragraph indentations.
- Do not use spaces for paragraph indentations.
- Do not add extra spaces or carrier returns.

Paragraph Identification

Flush—A flush paragraph is identified by two or more carrier returns.

Indented—An indented paragraph is identified by a carrier return and tab, or multiple carrier returns and a tab.

EXAMPLE OF MARKED COPY

```
ⓙ The faster pace of business today demands more of all beginning
  office workers--more highly developed skills and increased technical
  "know-how".  Company training programs take for granted that basic
  skills have already been mastered.
```

EXAMPLE OF RECORDED COPY

```
1  xjThe faster pace of business today demands more of all beginning
2  office workers-more highly developed skills and increased technical
3  "know-how."  Company training programs take for granted that basic
4  skills have already been mastered.
5
6  s,
```

EXAMPLE OF OUTPUT COPY

The faster pace of business today demands more of all beginning office workers—more highly developed skills and increased technical "know-how." Company training programs take for granted that basic skills have already been mastered.

JUSTIFIED COPY WITH PARAGRAPH INDENTS

The layout man desires the output copy to look like Example 1.

EXAMPLE 1 OUTPUT COPY

A Reference Code is a combination of 63 codes, the last of which is a Carrier Return Code. All Reference Codes are identical.

As you record, you will mark pages by recording Reference Codes. To record a Reference Code is a two-step procedure.

As you can see, the paragraphs are indented. If paragraphs are to be indented, a tab must be recorded at the beginning of the first line of each paragraph. (See Example 2). In the JUSTIFY MODE ONLY the output Composer never tabs. The output unit will convert this tab to a given value of space. The value is entered at the control panel on the MT/SC system for the Paragraph Indent instruction. The output Composer will space the number of units entered for the Paragraph Indent instructions every time a tab is read on the magnetic tape.

EXAMPLE 2 – MARKED COPY

8

ⓙ A Reference Code is a combination of 63 codes, the last of which is a Carrier Return Code. All Reference Codes are identical.

As you record, you will mark pages by recording Reference Codes. To record a Reference Code is a two-step procedure.

FLUSH LEFT

Flush left output copy has an even left margin but an uneven right margin.

Recorded line endings determine the length of the output line; no measure is necessary.

Tabs, Carrier Returns, and spaces are honored; therefore, text and arrangement of output lines are identical to that of input lines.

The unit value of all spaces equals the Minimum Interword Space value entered from the Control Panel.

All lines following this code will print at the left margin of each subsequent field until a mode change is made.

In flush left copy, a field is any segment of text beginning with a tab or carrier return and ending with a tab or carrier return. In non-tabular material, a line is a field; in tabular material, one line of a column is a field.

Code Placement

The Flush Left Code must be recorded at the beginning of a field.

Steps to Record a Flush Left Code

1. Record a Prefix Code.
2. Type the letter "l".
3. Begin typing text copy.

Guides to Recording for Flush Left Copy

- Type lines exactly as indicated by the layout designer, even when ended by a hyphenated word. If line endings are not marked, type line for line. All recorded spaces, tabs, and carrier returns will be honored on the output copy.

EXAMPLE OF MARKED COPY

ⓛ Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike over for corrections

EXAMPLE OF RECORDED COPY

1 xl Hard copy for proofreading
2 IBM "Selectric" Typewriter touch
3 Backspace and strike over for corrections
4
5 s,

EXAMPLE OF OUTPUT COPY

Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike over for corrections

CENTER

Centered output copy will have lines centered within a specific unit measure. An equal amount of white space is automatically distributed to the left and right of the typed line.

Steps to Record a Center Code

1. Record a Prefix Code.
2. Type the letter "c".
3. Begin typing the text copy.

All lines following this code are centered within the unit measure selected for the project. An equal amount of white space is automatically distributed to the left and right of the typed line. The Center Code affects all fields until a mode change is made.

If the unit value of a line is greater than the measure, that line will print flush left.

Code Placement

The Center Code must be recorded at the beginning of a field. Lines to be centered will be recorded at the left margin.

Guides to Recording for Centered Copy

- Type each line at the left margin.
- Type lines exactly as indicated on the copy. All recorded spaces, tabs, and carrier returns will be honored on the output copy.

EXAMPLE OF MARKED COPY

```
ⓒ Hard copy for proofreading

  IBM "Selectric" Typewriter touch

  Backspace and strike over for corrections

  Magnetic tape with 24,000 character capacity

  Automatic body text composition

  Camera-ready output copy
```

EXAMPLE OF RECORDED COPY

```
1xcHard copy for proofreading

2IBM "Selectric" Typewriter touch

3Backspace and strike over for corrections

4Magnetic tape with 24,000 character capacity

5Automatic body text composition

6Camera-ready output copy

7

8s,
```

EXAMPLE OF OUTPUT COPY

Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike over for corrections
Magnetic tape with 24,000 character capacity
Automatic body text composition
Camera-ready output copy

FLUSH RIGHT

Flush right copy is output copy with even right margins and uneven left margins. The right margin is determined by the measure coded on tape or entered from the control panel of the output unit. The text of the output lines will be identical to the text of the input lines.

The Flush Right Code may be recorded at the beginning of a line or in the middle of a line.

When the Flush Right Code is recorded in the middle of a line, the output lines will be even at both margins but text is separated by white space. The amount of white space is determined by the line measure.

All text following this code prints at the right margin defined by the measure. The measure, minus the unit length of the printed text, determines how much white space appears in the output line.

If the unit value of a line is greater than the measure, that line will print flush left.

Steps to Record a Flush Right Code

1. At the beginning of a line (may be recorded on tape or entered from the control panel of the output unit):
    a. Record a Prefix Code.
    b. Type the letter "r" at the beginning of the first line.
    c. Type the remaining lines at the left margin.

Guides to Recording a Flush Right Code at the Beginning of the Line

- Type each line at the left margin.
- Type lines exactly as indicated on the copy. If line endings are not marked, type line for line. All recorded spaces, tabs, and carrier returns will be honored on the output copy.

EXAMPLE OF MARKED COPY

ⓡ Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike over for corrections
Magnetic tape with 24,000 character capacity

EXAMPLE OF RECORDED COPY

```
1xrHard copy for proofreading
2IBM "Selectric" Typewriter touch
3Backspace and strike over for corrections
4Magnetic tape with 24,000 character capacity
5
6s,
```

EXAMPLE OF OUTPUT COPY

Hard copy for proofreading
IBM "Selectric" Typewriter touch
Backspace and strike over for corrections
Magnetic tape with 24,000 character capacity

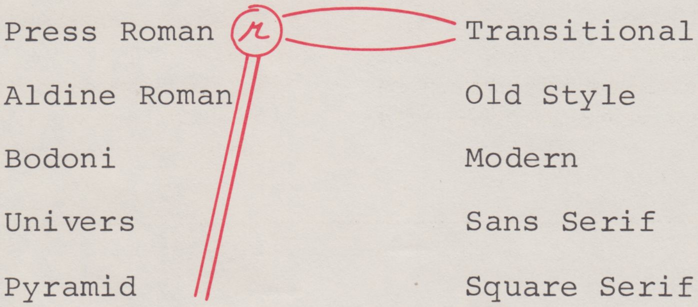
2. In the middle of a line (cannot be entered from the control panel). White space separates flush left and flush right material.

   a. Type the part of the line which is flush left; record a Prefix Code.
   b. Type the letter "r".
   c. Type the portion of the line which is flush right.
   d. Carrier return and repeat all steps for each line.

Guides to Recording a Flush Right Code in the Middle of a Line

- The "r" Code must be recorded in each line.
- Type each line at the left margin exactly as indicated on the copy. All recorded spaces, tabs, and carrier returns will be honored on the output copy.

EXAMPLE OF MARKED COPY



Press Roman r Transitional

Aldine Roman Old Style

Bodoni Modern

Univers Sans Serif

Pyramid Square Serif

EXAMPLE OF RECORDED COPY

```
1xPress RomanrTransitional

2Aldine RomanrOld Style

3BodonirModern

4UniversrSans Serif

5PyramidrSquare Serif

6

7s,
```

EXAMPLE OF OUTPUT COPY

Press Roman	Transitional
Aldine Roman	Old Style
Bodoni	Modern
Univers	Sans Serif
Pyramid	Square Serif

DOT LEADER

Dot leadered output copy will have dots (periods) automatically inserted to expand the line to a specified measure.

The amount of white space separating the dots will be determined by the MT "Selectric" Composer. The dots will be vertically aligned on the output copy.

The Dot Leader Code may be recorded at the beginning of a line, in the middle of a line, or at the end of a line.

All text following this code is arranged like that in flush right copy except that the white space is filled with dot leaders. The measure minus the unit length of the printed text determines how much space is filled with dot leaders.

If the unit value of a given line is greater than the measure being used, that line will print flush left, and no dot leaders will appear.

Code Placement

A dot Leader Code may be recorded at the beginning of a line, in the middle of a line, or at the end of a line.

At the Beginning of a Line:

A Dot Leader Code recorded at the beginning of a line (following a carrier return) causes dot leaders to be inserted to the left of the text of that entire line. That one code also causes all subsequent lines to begin with dot leaders until a mode change is made.

Steps to Record a Dot Leader Code

1. At the beginning of a line (may be recorded on tape or entered from the control panel of the output unit). This copy is similar to flush right output lines, but the white space to the left of the line is filled with leader dots.
    a. Record a Prefix Code.
    b. Type the letter "d" at the beginning of the first line.
    c. Type the remaining lines at the left margin.

EXAMPLE OF MARKED COPY

ⓓ Hard copy for proofreading

IBM "Selectric" Typewriter touch

Backspace and strike over for corrections

EXAMPLE OF RECORDED COPY

1 xdHard copy for proofreading

2 IBM "Selectric" Typewriter touch

3 Backspace and strike over for corrections

4

5 s,

EXAMPLE OF OUTPUT COPY

. . . . Hard copy for proofreading
. . . . IBM "Selectric" Typewriter touch
. . . . Backspace and strike over for corrections
. . . . Magnetic tape with 24,000 character capacity
. . . . Automatic body text composition
. . . . Camera-ready output copy

2. In the middle of a line (cannot be entered from the control panel). These dot leaders separate flush left and flush right material.

   a. Type the part of the line which is flush left; record a Prefix Code.
   b. Type the letter "d".
   c. Type the portion of the line which is flush right.
   d. Carrier return and repeat all steps for each line.

Guides to Recording a Dot Leader Code in the Middle of a Line

- The "d" Code must be recorded in each line.

- To insure vertical alignment of numbers at the output unit, space twice for each digit position not occupied by a number unless otherwise specified by the layout designer. Remember, on the MT "Selectric" Composer each number is 6 units wide, each space is only 3 units.

EXAMPLE OF MARKED COPY

Preparing Source Records ⓓ 13
Computing the Payroll 14
Writing the Payroll 16

EXAMPLE OF RECORDED COPY

```
1xPreparing Source Recordsd13

2Computing the Payrolld14

3Writing the Payrolld16

4

5s,
```

EXAMPLE OF OUTPUT COPY

Preparing Source Records 13
Computing the Payroll 14
Writing the Payroll 16

3. At the end of a line (cannot be entered from the control panel). This copy contains flush left text with dot leaders filling out the line.

   a. Type the part of the line which is flush left; record a Prefix Code.
   b. Type the letter "d".
   c. Carrier return and repeat all steps for each line.

Guide to Recording a Dot Leader Code at the End of a Line

- The "d" Code must be recorded in each line.

EXAMPLE OF MARKED COPY

Hard copy for proofreading ⓓ
IBM "Selectric" Typewriter touch ⓓ
Backspace and strike over for corrections ⓓ

EXAMPLE OF RECORDED COPY

1 xHard copy for proofreadingd
2 IBM "Selectric" Typewriter touchd
3 Backspace and strike over for correctionsd
4
5 s,

EXAMPLE OF OUTPUT COPY

Hard copy for proofreading . . . .
IBM ''Selectric Typewriter touch . . . .
Backspace and strike over for corrections . . . .

FORMAT CODES

Format Codes are a second group of Composer Control Codes. They are instructions recorded on the tape to control line length on the output copy. The two Format Codes are:

`m---,`	`for Measure`
`i---, or i,`	`for Indent`

The Measure Code indicates line length for Justify, Flush Right, Center, and Dot Leader Modes. The Indent Code spaces in the left margin a specified number of units and thus reduces the length of the printed output line. The actual measure (line length) stored in the machine is not changed.

The Measure and Indent Codes may be recorded on tape or may be entered from the output unit control panel. To record a Format Code, first record a Prefix Code. Then type the appropriate character, such as "i" for an Indent Code. (Remember, this character will print in red as do the Mode Codes, since it is also preceded by a Prefix Code.) The Measure Code is always followed by a value and a comma. The Indent Code is always followed by a value and a comma or just by a comma.

When the tapes you record are played back on the MT/SC output unit, the Format Codes remain effective until another Format Code is read from the tape or inserted from the control panel.

The MT/SC output unit neither prints the character nor stops printing when it reads a Format Code; automatic playback continues.

MEASURE

The measure governs the line length of justified, centered, flush right, and dot leadered output copy.

Although you may plan line length in picas or inches, the MT/SC requires that the measure be given in units. On the MT/SC, the unit value of a pica is variable and is determined by the escapement setting of the output printer. The escapement setting is related to the type size.

Once the pica line length has been determined the measure is found by multiplying the number of units per pica by the pica line length.

The chart below shows the type sizes and unit values per pica for each of the three escapement positions.

Escapement Position	Type Size	Units per Pica
Red	11 and 12 point	12
Yellow	9 and 10 point	14
Blue	6, 7, and 8 point	16

A Measure Code MUST always be followed by a number and a comma. If the comma is omitted, there will be an error when the tape is played back at the output unit.

Steps to Record a Measure Code

1. Record a Prefix Code.
2. Type the letter "m".
3. Type the number of units marked on the copy.
4. Type a comma.

Guides to Recording a Measure Code

- Terminate the Measure Code by a comma. This is a MUST because the comma completes the instruction.

- Use the numeral one (1) when that number is required in recording the unit value. Never use the lower case letter "l" for the number one.

The Measure is used to SET or CHANGE line length at any given point in the text material.

For example: m360,—The number represents units for the length of line, and the comma terminates the code.

EXAMPLE OF MARKED COPY

ⓙ ⓜ 288,

√A typist records from a manuscript which has been coded for the MT/SC by a layout designer. As the manuscript is recorded and stored on magnetic tape, typed copy is produced.

ⓜ 228,

√Codes, which print in red on the typed copy, are recorded on the tape by a series of keyboard functions which can be incorporated easily with "touch typing." These codes will regulate the arrangement of the output copy.

EXAMPLE OF RECORDED COPY

```
1 xjm288,A typist records from a manuscript which has been coded
2 for the MT/SC by a layout designer.  As the manuscript is
3 recorded and stored on magnetic tape, typed copy is produced.
4
5 m288,Codes, which print in red on the typed copy, are recorded
6 on the tape by a series of keyboard functions which can be
7 incorporated easily with "touch typing."  These codes will
8 regulate the arrangement of the output copy.
9
0 s,
```

EXAMPLE OF OUTPUT COPY

A typist records from a manuscript which has been coded for the MT/SC by a layout designer. As the manuscript is recorded and stored on magnetic tape, typed copy is produced.

Codes, which print in red on the typed copy, are recorded on the tape by a series of keyboard functions which can be incorporated easily with "touch typing." These codes will regulate the arrangement of the output copy.

INDENT

An Indent Code will automatically indent all subsequent lines a given number of units. The actual measure is not changed. The indent value must be smaller than the measure. Indents may be used for applications such as runarounds.

For example, j 20, tells the machine to indent all lines following 20 units.

To cancel the indent, record an Indent Cancel Code by typing i,. (The i, with no number represents an indent of zero units.)

Indent and Indent Cancel Codes must always be ended with a comma. If the comma is omitted, there will be an error when the tape is played back at the output unit.

Steps to Record an Indent Code

1. Record a Prefix Code.
2. Type the letter "i".
3. Type the number of units for the indent.
4. Type a comma.

Guides to Recording an Indent Code

- Terminate an Indent Code by a comma. This is a MUST, since the comma completes the instruction.
- Use the numeral one (1) when that number is required in recording the unit value. Never use the lower case letter "l" for number one.

Steps to Record an Indent Cancel Code

1. Record a Prefix Code.
2. Tyep the letter "i".
3. Type a comma.

Guide to Recording an Indent Cancel Code

- Terminate an Indent Cancel Code by a comma. This is a MUST, since the comma completes the instruction.

EXAMPLE OF MARKED COPY

ⓙ ⓜ 288,

When an Indent Code is recorded in the middle of a paragraph, only those lines which print after the code has been read will be indented. Since output lines of justified copy rarely match input lines, it is difficult to record the Indent Code in a position to assure that an exact number of lines is indented.

ⓘ 24,

Indented justified copy may take several forms such as runarounds, hanging indents, etc. These, however, are considered special applications and are covered in separate sections.

EXAMPLE OF OUTPUT COPY

Measure 288 Units

When an Indent Code is recorded in the middle of a paragraph, only those lines which print after the code has been read will be indented. Since output lines of justified copy rarely match input lines, it is difficult to record the Indent Code in a position to assure that an exact number of lines is indented.

Indented justified copy make take several forms such as runarounds, hanging indents, etc. These, however, are considered special applications and are covered in separate sections.

Indent 24 Units

The layout man wants the first paragraph to be justified. He indicates this to the recording operator by a ⓙ on the marked copy. This ⓙ tells the recording operator to record a Prefix j Code on the magnetic tape. He also desires a measure of 288 units. This is indicated to the recording operator by a ⓜ 288, on the marked copy. The ⓜ 288, tells the recording operator to record a Prefix m 288, on the tape after the Prefix j and prior to recording the text.

The second paragraph is also to be justified to a measure of 288 units but requires a line indent of 24 units. The layout man will indicate this to the recording operator by a ⓘ 24, on the marked copy. This tells her to record a Prefix i 24, on the tape prior to recording the text.

The comma is an essential part of the format codes and must always be used to terminate a format code.

It is not necessary to record another Prefix j or Prefix m 288, since neither the mode nor the measure has been changed.

ADDITIONAL CODES

Two additional codes, Stop Code and Fixed Space Code, complete the Composer Control Codes. They are used for special situations and must be recorded on tape. They cannot be entered from the control panel.

STOP CODE

The Composer Stop Code will stop the MT "Selectric" Composer at any given point. This is the same code you have been recording at the end of a project so the MT "Selectric" Composer stops printing. Another use of the Stop Code is to permit the output operator to make Type Font and Leading changes.

For example: s PR–I, – The Stop Code stops the machine so the output operator can change to a Press Roman-italic Type Font. The comma ends the coded instruction.

All typing between the Prefix Code and the comma is considered a part of the instruction and must not contain other codes, carrier returns, tabs, or commas (such as commas used in big numbers). Remember, a comma ends the instruction. The complete instruction must be recorded on one line.

If the terminating comma is not recorded, the MT "Selectric" Composer will read through the copy until a comma is read, and several output lines could be omitted.

NOTE: The combination of red "s"-,instruction-comma [sPR-M-12/13,] will not print on the output copy but will stop the MT/SC.

Steps to Record a Composer Stop Code for Font, Leading, or Other Changes

1. Record a Prefix Code.
2. Type the letter "s".
3. Type the message.
4. Type a comma.

Steps to Record a Composer Stop Code to End a Project

1. Record two carrier returns.
2. Record a Prefix Code.
3. Type the letter "s".
4. Type a comma.
5. Carrier return.

Guides to Recording a Stop Code

- Terminate a Stop Code by a comma. This is a MUST since the comma completes the instruction.

- Record no additional codes, carrier returns, tabs, or commas between the "s" and the comma, i.e., the instruction must be completed on a single line.

FIXED SPACE CODE

The Fixed Space Code is used in justified copy when the layout designer wants more than one space or when a nonexpandabe, 3-unit space is required. Remember, on the output unit, spaces between words will be expanded in order to justify copy.

The layout designer may specify Fixed Space Codes to leave space to ALIGN NUMBERS or a space occurring within a separate group of letters that are not to be separated into words. For example, the name –J. M. Lamberth– should never be separated on two lines. However, there must be space between the first period and the M and between the second period and the L. These spaces can be inserted with the Fixed Space Code.

On your hard copy, a Fixed Space Code will be represented by a red comma.

Steps to Record a Fixed Space Code

1. Record a Prefix Code.
2. Type a comma.

Guide to Recording A Fixed Space Code

- DO NOT RECORD a space, tab, or carrier return following a Fixed Space Code unless specified by the layout designer. The next word should be typed on the same line.

EXAMPLE OF MARKED COPY

ⓙ (,) (,) 9. When recording for justified copy, line endings
as they appear on the original copy are disre-
garded. Typing continues to the right margin.

EXAMPLE OF RECORDED COPY

```
1
2
3
4 j,,9.       When recording for justified copy, line endings
5 as they appear on the original copy are disregarded.
6 Typing continues to the right margin.
7
8 s,
```

EXAMPLE OF OUTPUT COPY

9. When recording for justified copy, line endings as they appear on the original copy are disregarded. Typing continues to the right margin.

PREPARATION OF A CORRECTION TAPE

Most typing errors are sensed immediately and corrected by line returning or backspacing and striking over. Those you do not correct immediately will be marked by the proofreader. There may also be author alterations involving additions or deletions. Author changes may vary in length from a single word or line to several paragraphs. These corrections and changes will be reflected on your final output copy by the use of a Correction Tape. The Correction Tape will contain only the corrected lines, the new lines, and the locations of deleted lines.

Some of the situations where a Correction Tape might be used are:

1. Typographical Errors
2. Coding Errors
3. Proofreader's corrections or author's alterations.

The original and the Correction Tape will be placed on the MT/SC and lines automatically merged in the correct position during the composing operation. The pattern of Reference Codes on the Correction Tape must correspond with that of the original tape.

To insure that this works properly, you should LOAD both tapes. A search operation is then initiated which causes the right tape to search and then the left tape to search. The machine stays in an address left condition. The first time it reads it will read the address code and the number of the line to be edited. It will then switch to the right station. It will begin reading and continue until it reaches the line to be edited. It then switches to the left station and reads the line plus the address of the next line to be edited. The machine switches back to the right station and dumps the edited line. Due to this sequence, the next reference code on the left tape will be sensed before the next reference code on the right tape is reached. This tells the machine that any edit information following the reference code on the left tape should not be used until a reference code on the right tape is read. These are not true search operations. The machine merely reads through the reference codes.

ADDRESS CODE

The Address Code is used ONLY in preparing a Correction Tape. An Address Code signals the output unit to read the "address" line* from the Correction Tape rather than from the original tape. An Address Code MUST ALWAYS be followed by a number, a comma, and a carrier return, or a comma and a carrier return. The number indicates which line on the original tape is to be replaced. The comma terminates the code, and the carrier return instructs the output unit to hold the line number in memory until the "addressed" line is reached on the original tape. Each line requiring a correction must be ADDRESSED separately and COMPLETELY RETYPED.

* The "addressed" line is the line to be corrected. Remember, each input line is identified by a number.

An Address Code followed by a comma and carrier return only indicates that there are no more correction lines on the tape. From that point on, the output unit will read just from the original tape.

Steps to Record an Address Code

1. Record a Prefix Code.
2. Type the letter "a" (upper or lower case).
3. Type the number of the line to be corrected.
4. Type a comma.
5. Carrier return.

Guides to Recording an Address Code

- Always follow the Address Code by a number, a comma, and a carrier return, or a comma and a carrier return.
- Use the numeral one (1) when that number is required in recording the line number. Do not use the lower case "l" for the number one.
- Address separately each line to be corrected.
- Make Reference Codes on both the original and the Correction Tape correspond.

  For example, if a correction is made on Line 15 at Reference Code 3, the Correction Tape must also have at least three Reference Codes.

EXAMPLE OF MARKED COPY FOR PREPARING CORRECTION TAPE

Ref Code 1 *Pg* 1 *Begin all pages on Line 1.*

1 xjm288,Today there is literally an information explosion. It has

2 developed in part because of our increased p~~u~~opulation, which is more

3 highly educated and cultured than ever. Our population is consuming

4 more published material in the form of books, journals, magazines,

5 and other publications than ever before. And, in the past few

6 years, our technology has increased at a tremendously accelerated

7 rate. The growth of scientific capabilities is stimulated by research

8 by tens of thousands of scientists hoping for publication in books,

9 in the journals, in special reports, in papers to be delivered

10 at professional meetings. add 1 CR

1 It is not unusual for a research and development laboratory to add

2 over a thousand new special scientific reports to its research

3 library every year, in addition to the many reports of its own

14 creation printed in-plant. ~~Furthermore, these reports are viewed and~~

15 ~~abstracts are written and printed for distribution to staff engineers~~

16 ~~and scientists~~. You can see how the information explosion has placed

7 a great burden of production on both commercial and in-plant

8 publishing operations.

9

0 s,

1 done in many areas, supported by government

2 and other interests. Naturally this growth has

3 created a flood of information prepared

4

5

RECORDING CORRECTION TAPE

To Correct or Replace a Line

Remember, a carrier return standing alone is considered a line.

1. Record a Prefix Code.
2. Type the letter "a".
3. Type the number of the line to be corrected or replaced.
4. Type a comma.
5. Carrier return.
6. Retype the complete line including any changes.
7. Carrier Return
8. Repeat the same procedure for each line to be corrected or replaced.

xa2,

developed in part because of our increased population, which is more

To Add a Line or Lines

1. Record a Prefix Code.
2. Type the letter "a".
3. Type the number of the line that precedes the point of addition.
4. Type a comma.
5. Carrier return.
6. Retype the "addressed" line completely; end with a carrier return.
7. Insert the additional line or lines.
8. End the last line added with a carrier return.
9. Repeat the same procedure for each line to be added.

a7,

rate. The growth of scientific capabilities is stimulated by research

done in many areas, supported by government and other interests.

Naturally this growth has created a flood of information prepared

To Add a Carrier Return(s)

1. Record a Prefix Code.
2. Type the letter "a".
3. Type the number of the line that precedes the point of addition.
4. Type a comma.
5. Carrier return.
6. Retype the "addressed" line completely; end with a carrier return.
7. Insert the additional Carrier Return(s).
8. Follow the appropriate procedure for the next correction.

```
a 10,

at professional meetings.


a 14,
```

To Delete a Line or a Carrier Return

1. Record a Prefix Code.
2. Type the letter "a".
3. Type the number of the line to be deleted.
4. Type a comma.
5. Carrier return.

```
a 14,

creation printed in-plant.

a 15,

a 16,

You can see how the information explosion has placed

a ,
```

To End the Correction Tape

1. Record a Prefix Code.
2. Type the letter "a".
3. Type a comma.
4. Carrier return.

Summary: Preparation of a Correction Tape

1. Load new tape.
2. Insert plain paper.
3. Record a Reference Code(s).
4. Record a Prefix Code.
5. Type the letter "a".
6. Type the number of the line to be corrected.
7. Type a comma.
8. Carrier return.
9. Make the necessary correction. Remember, the line must be completely retyped.
10. Carrier return.
11. Follow steps 4 through 10 for each line to be corrected.
12. Follow procedure for ending a Correction Tape.

SUMMARY: COMPOSER CONTROL CODES

	As Coded by Layout Designer	As Recorded by Recording Operator
MODE CODES		
Justify Code	ⓙ	j
Flush Left Code	ⓛ	l
Flush Right Code	ⓡ	r
Center Code	ⓒ	c
Dot Leader Code	ⓓ	d
FORMAT CODES	(See note below.)	
Measure Code	ⓜ---,	m ---,
Indent Code	ⓘ---,	i ---,
Indent Cancel Code	ⓘ,	i ,
ADDITIONAL CODES		
Stop Code	ⓢ---, or ⓢ,	s ---, or s ,
Fixed Space Code	(,)	
Reference Code	ⓧ	
Address Code	ⓐ--, or ⓐ,	a --, or a ,

NOTE: The dashes (---) indicate that a number or an instruction must come between the code character and the comma.

SELF APPRAISAL TEST

Section II

1. Name the five basic modes of the MT/SC.

Answer: __________ __________ __________ __________ __________

2. Which of the following codes are considered format codes?

a. Prefix j, Prefix d
b. Prefix x, Prefix c
c. Prefix m, Prefix i
d. Prefix a, Prefix s

Answer: ________

3. Which of the following Composer control codes must be followed by a comma?

a, j, l, c, r, d
b. j, m, x, c,
c. i, x, c, a,
d. a, i, m, s,

Answer: ________

4. When recording, for which of the following modes may the operator record without regard to line endings?

a. Flush Left
b. Center
c. Dot Leadering
d. Justify
e. All of the above

Answer: ________

5. The measure governs the line length of the output copy in which of the following modes?

a. justify, flush left, dot leader
b. justify, dot leader, flush right, center
c. dot leader, flush left, centered
d. justify, centered, flush left

Answer: ________

ANSWERS

1. Justify, flush left, flush right, centered, dot leader
2. C
3. D
4. D
5. B

SECTION III — MT/SC OPERATION

SECTION III — Learning Objectives

1. Identify the components of the MT/SC system.
2. The load, unload, and search operations on the magnetic tape reader.
3. The function of the skip and reread buttons on the magnetic tape reader.
4. The functions of the control panel and how to enter layout and set-up instructions.

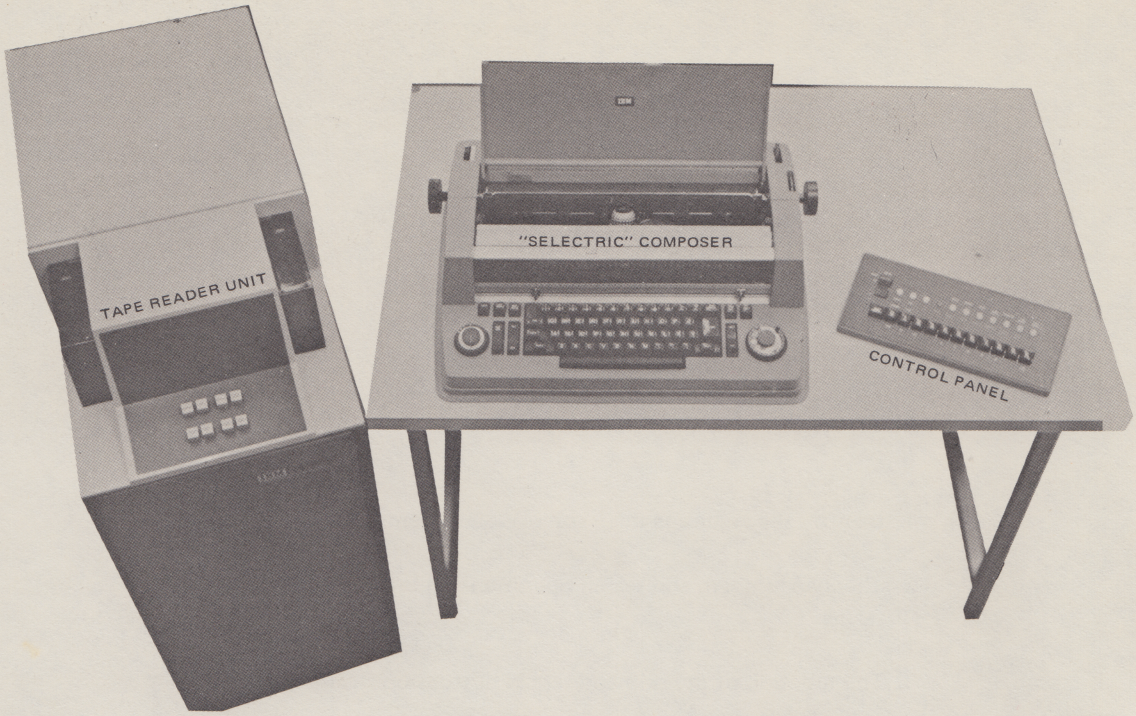


FIGURE 5 – MT "SELECTRIC" COMPOSER OUTPUT UNIT

THE MT "SELECTRIC" COMPOSER OUTPUT UNIT

The output unit of your IBM Magnetic Tape "Selectric" Composer system consists of a regular "Selectric" Composer as the Output Printer, a Tape Reader Unit, and a Control Panel. Each is covered in detail in this manual. (Fig. 5)

OUTPUT PRINTER FEATURES

The Output Printer of the Magnetic Tape "Selectric" Composer appears identical to a regular "Selectric" Composer which is not part of an automated system. It has, however, the added capacity to be linked to the tape drive mechanism of a Tape Reader Unit to produce automatic playback.

Because the Printer is like a regular Composer, it contains features used for manual operations which you will not be using for automatic playback. The features important to your use of the Composer as an output printer for the MT/SC system are explained in this section.

On/Off Control

The On/Off Control on the output printer should ALWAYS be in the On position. This does not give the printer power but is a safeguard against the possibility of your starting the MT "Selectric" Composer when the output printer is not yet ready to print. (Fig. 6)

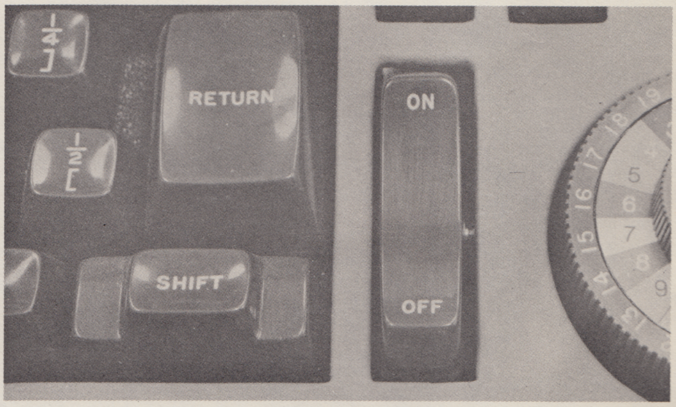


FIGURE 6 – ON/OFF CONTROL

Since the printer works in conjunction with the Tape Reader Unit and the Control Panel, to be able to use the printer alone, it is also necessary to turn on the power controls at the Control Panel. To do this, simply depress the red Power Control Switch on the Control Panel. The Reset Light will come on to indicate that the system has power. At this point, however, only the output printer is operational. A second step to be explained later is required to make the Tape Reader and the Control Panel operational. (Fig. 7)

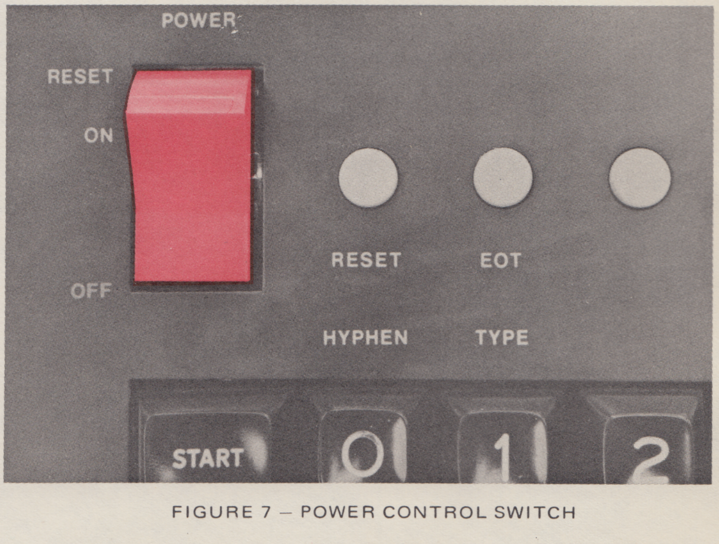


FIGURE 7 – POWER CONTROL SWITCH

If the typewriter keyboard On/Off Control should be in the Off position, even though the system is getting power from the Control Panel and the tape is being read, the printer will not print.

TAPE READER UNIT

The Tape Reader Unit is a two-tape station console. It reads recorded magnetic tapes which cause the print-out of typographic copy on the MT "Selectric" Composer.

Remember, power is supplied to the printer by depressing the red Power Control on the Control Panel. Power is supplied to the Tape Reader Unit and the Control Panel when you hold the Power Control in the On position until the Reset Light goes out. You will hear a distinctive sound and the Clear Light will come on.

TAPE STATIONS

Right Tape Station

The text, or original, tape is placed on the Right Tape station. This tape contains the majority of the recorded material that matches the hard copy from which you work.

Left Tape Station

The Left Tape Station is used only when a Correction Tape has been recorded. A Correction Tape contains only those lines required to change or correct material recorded on the original tape.

Tape Station Covers

The Tape Station Covers are safeguards against trying to remove tapes which are loaded in the Tape Reader Unit. A Tape Station Cover can only be raised when the tape has been completely drawn into the Tape Cartridge. (Fig. 8)

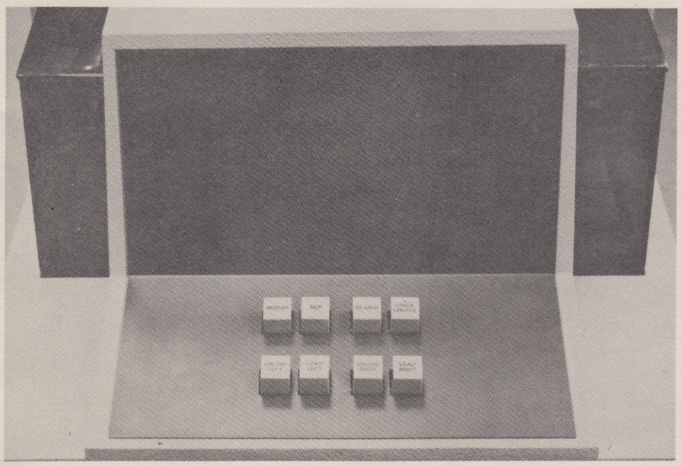


FIGURE 8 — TAPE STATION COVERS

Cover Unlock Button

The Cover Unlock Button releases both the Left and Right Tape Station Covers. The Cover Unlock Button will only unlock a Station Cover after that tape has been unloaded and completely drawn back into the Cartridge. (Fig. 9)

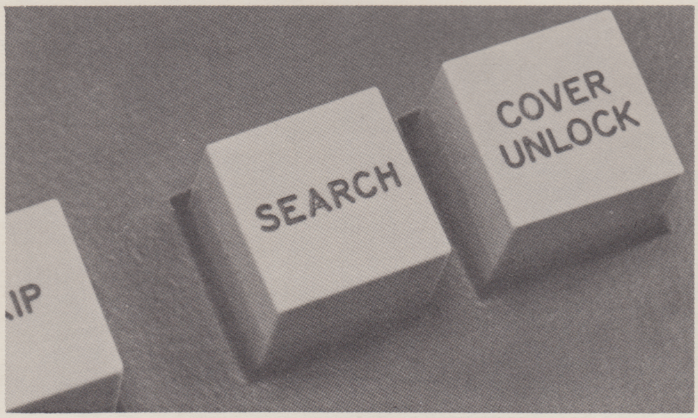


FIGURE 9 — COVER UNLOCK BUTTON

Load Right and Load Left Buttons

The Load Right and Load Left Buttons are used to pull the right and left tapes, respectively, into position to be read. After a tape cartridge has been placed on the Tape Station, depress the appropriate Load Button once (do not hold it down). As the tape loads, the EOT Light flashes and the machine makes a distinctive clicking sound. When the tape is loaded, it is at the first recorded position. (Fig. 10)

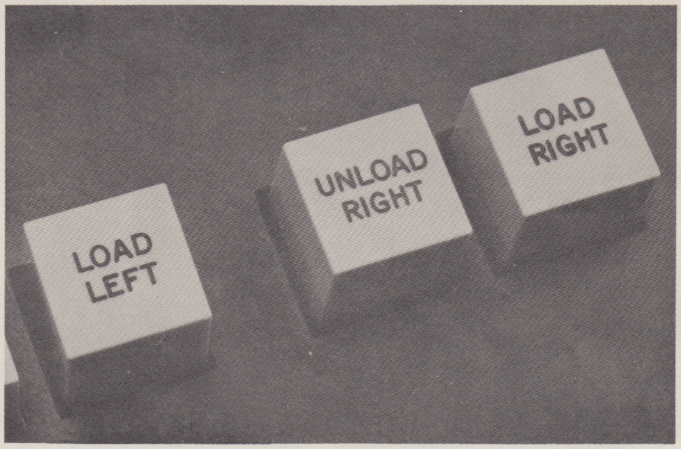


FIGURE 10 — LOAD RIGHT AND LOAD LEFT BUTTONS

Unload Right and Unload Left Buttons

The Unload Right and Left Buttons pull the right and left tapes, respectively, back into the appropriate tape cartridge. You hear no sound as the tape unloads, but you will hear one dull "thunk" as a signal that the entire tape is back in the cartridge. You may then depress the Cover Unlock Button to lift the Station Cover and remove the tape. (Fig. 11)

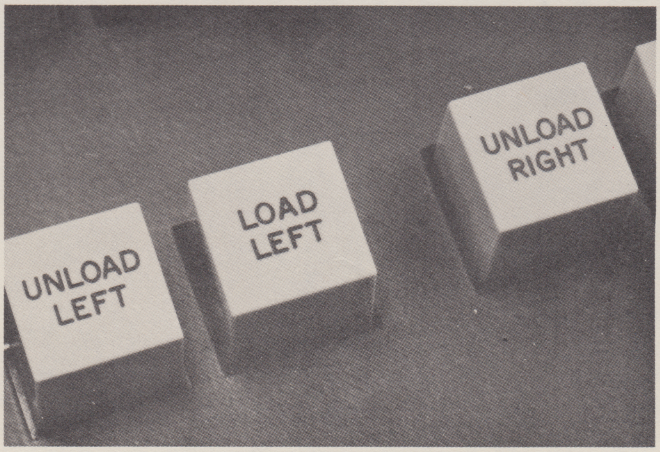


FIGURE 11 — UNLOAD RIGHT AND UNLOAD LEFT BUTTONS

LOCATING SECTIONS OF TAPE

When material is recorded on magnetic tape, it is necessary to mark its place so that it can be easily located for playout. This is done by recording a code known as a Reference Code.

Search Button

Loading the tape automatically positions it at the first recorded position, ready to play out the first page recorded on the tape. Reference Code 2 can be located by depressing the Search Button twice; Reference Code 3, by depressing the Search Button three times, etc.

After the Search Button has been depressed, wait for the machine to complete that search operation before searching to the next Reference Code. The EOT Light is on while search takes place. If a correction tape is placed on the Left Tape station, the Tape Reader Unit automatically searches both tapes.

Actually, the only time it is necessary to search with the Search Button is when playout is to begin at some point other than the first Reference Code. If playout is done sequentially (one page after another), the Tape Reader automatically reads through the Reference Code to the next page. (Fig. 12)

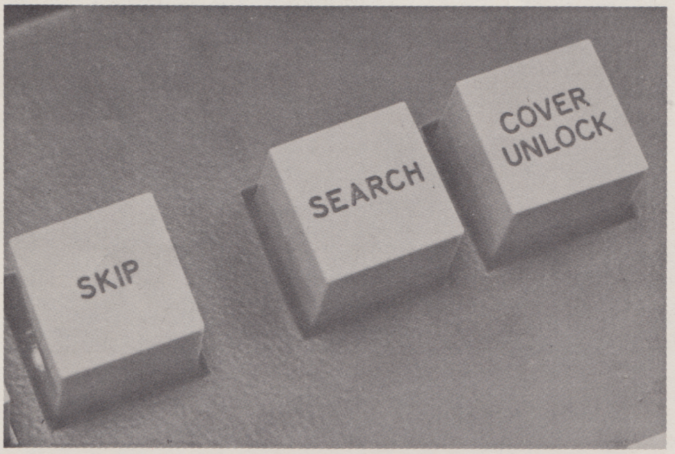


FIGURE 12 – SEARCH BUTTON

READING THE TAPE

Once the tape has been searched, the Tape Reader Unit is ready to read from the tape and simultaneously produce typographic copy at the output printer.

Each character and code recorded on the tape is read as it passes under the tape-read mechanism. Playback is automatic.

As long as the printer is active, the MT/SC is operating under tape control. You may stop playback by depressing the Line Stop Key, or it will stop when a recorded Stop Code is read. This permits you to make manual adjustments or change controls.

A Stop Code appears on the hard copy from which you work as a red "s". This code always precedes a recorded instruction which is terminated by a comma (sPR–M,). A Stop Code followed by a comma only is recorded at the end of each project (s,).

Other recorded codes control the arrangement of the MT/SC output copy, length of line to use, etc. These codes also appear in red on the hard copy you are following; however, they do not cause printing to stop. It reads a code, determines internally what to do next, and continues automatic playback. These control codes will be discussed further in another section of this manual.

As print-out begins, the Tape Reader Unit is actually reading a line ahead of the one being printed. The machine stores this line in memory and makes internal computations which cause the line to play out properly.

The MT/SC identifies and counts each line of typed copy, or input line, by the recorded carrier return at the end. You will find that most of the hard copy you receive is prepared on prenumbered paper. This is so each input line can be identified easily by a number. Then, when it is necessary to prepare a Correction Tape, each line to be changed or corrected can be "addressed" by its exact line number.

The Correction Tape contains only those lines which have been changed or corrected, along with an Address Code for each line. The Address Code is represented by a red "a" on the hard copy of the Correction Tape. With the exception of the last Address Code on the tape, the red "a" is always followed by a line number and a comma; e.g., a15,. When a Correction Tape is placed on the Left Station, the Tape Reader Unit reads and stores in memory the number of the first correction line.

Printing then begins from the original tape. Remember, the number of the correction line is being held in memory, and the Tape Reader is reading a line ahead of the one that is printing. When it comes to the line to be replaced on the original tape, it will automatically switch to the Correction Tape and read from that tape until the correction or change is completed and the number of the next correction line has been stored. In this manner, the recorded material from each tape is merged to produce perfect copy.

Although the copy you receive will have been proofread before it reaches your output unit, you may occasionally find an error that has been overlooked. In this case, you will request that a Correction Tape be made at the record unit.

"Error on Tape" Condition

If the Tape Reader Unit is unable to read a character that was recorded on the tape, the EOT Light on the Control Panel will come on and print-out will stop. (This might happen if the tape is bent or if an incomplete signal was received during recording.) (Fig. 13)

Reread Button

When the EOT Light comes on, by depressing the Reread Button on the Tape Reader Unit you can ask the machine to reread the character which caused the EOT condition. In some cases, depressing the Reread Button one or more times will cause the machine to start reading and printing again. If, however, reading and printing do not resume after depressing the Reread Button, depress the Skip Button one time. (Fig. 14)

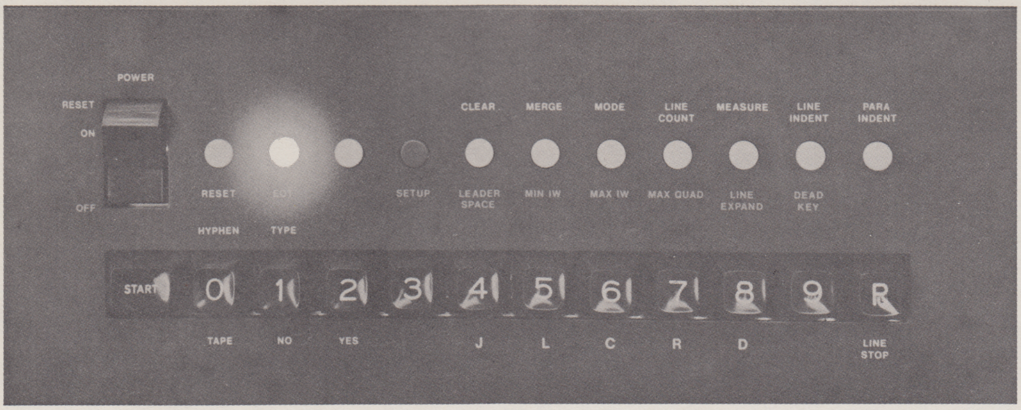

POWER
RESET
ON
OFF
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 13 – "ERROR ON TAPE" CONDITION

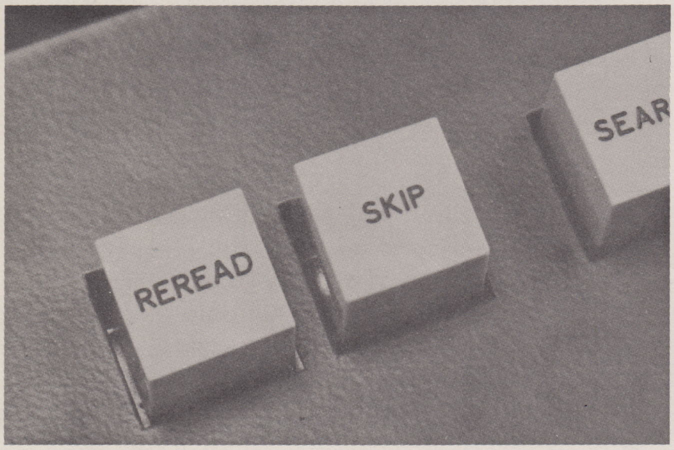

REREAD
SKIP
SEAR

FIGURE 14 – RE-READ BUTTON

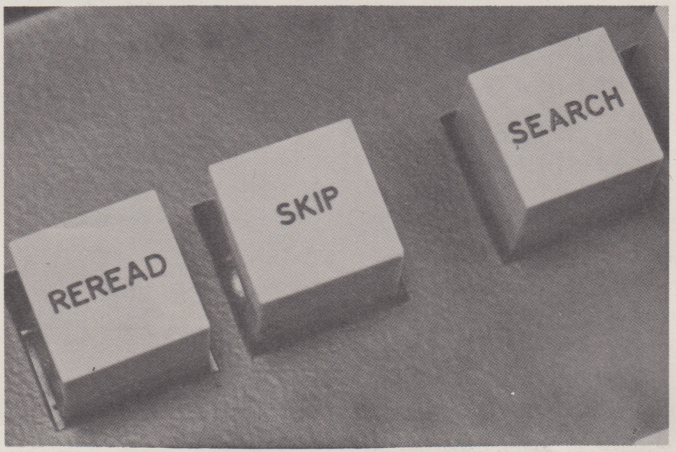

REREAD
SKIP
SEARCH

FIGURE 15 – SKIP BUTTON

Skip Button

The Skip Button is located on the Tape Reader Unit next to the Reread Button and is to be used only when the EOT Light is on. Depressing the Skip Button will instruct the machine to skip the character which caused the EOT condition. Remember, the line being read is not the one printing, but is the one being stored in memory. After depressing the Skip Button, print-out continues, but the skipped character is replaced with a 9-unit space. The line containing the missing character can be corrected later.

IMPORTANT: Depress the Skip Button ONLY ONCE for each EOT condition! (Fig. 15)

CONTROL PANEL

Typographic copy is composed automatically on the MT "Selectric" Composer from material recorded on the tape plus information entered from the Control Panel. (Fig. 16)

As you have just learned, print-out is regulated by the Composer Control Codes. With the exception of the Composer Stop Code, these recorded instructions do not stop the machine during playback. The machine reads the codes and responds to the instructions automatically.

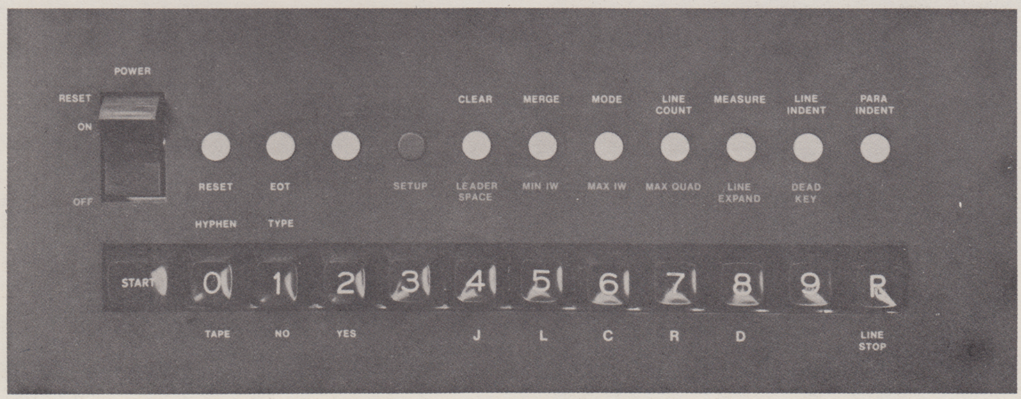

POWER
RESET
ON
OFF
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 16 – CONTROL PANEL

Some of these instructions can be either recorded on tape or entered from the Control Panel. Other instruction codes MUST be recorded on tape. They cannot be entered from the Control Panel. Recorded codes, however, will override a Control Panel entry.

In order to make an instruction change with a Control Panel entry, the machine must first read the recorded code. The line containing the recorded code will play out according to that code. After the line containing the recorded code has played out you can stop the Output Unit and then enter the new code at the Control Panel. The following lines will play out according to this Control Panel entry until another code is entered from the Control Panel or read from the tape.

If the code is to be changed for all lines (including the line containing the recorded code) a Correction Tape must be prepared by the recording operator. Otherwise, the line which played out according to the recorded instruction must be stripped in before the copy goes for reproduction.

The Control Panel consists of the power controls, the function keys, and the panel lights which guide you through layout and setup instructions.

Power Controls

The Power Control Switch on the Control Panel supplies power to the "Selectric" Composer (output printer), the Control Panel itself, and the Tape Reader Unit. (Fig. 17)

Remember, the On/Off Control on the typewriter keyboard must also be On for the printer to have power.

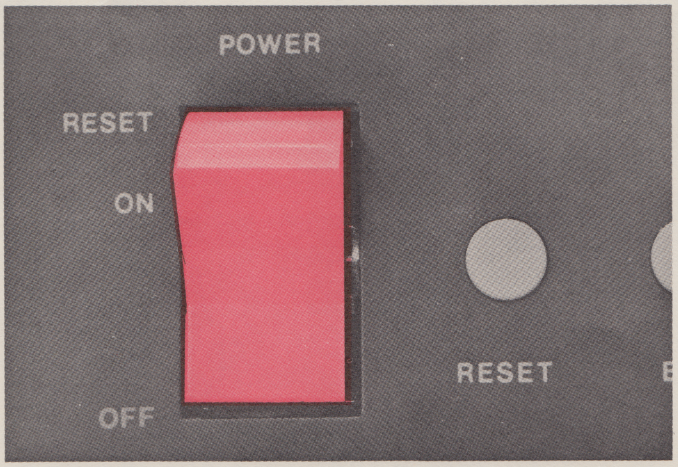


FIGURE 17 – POWER CONTROL SWITCH

Power On/Off

Turning on the power at the Control Panel is actually a two-step operation. First, push the red Power Control Switch to the On position. The Reset Light will come on and the output printer will be operational.

Reset Sequence

Then, depress the Power Control Switch to the second (Reset) level and hold it down until the Reset Light goes out and the Clear Light comes on. You will hear a distinctive sound as the Clear Light comes on. The entire output unit is now on and ready for operation.

If the power supply to the output unit should be interrupted (by electrical failure) while the machine is playing back, the Reset Light will be on when power returns. In this case, "reset" the machine by holding the Power Control Switch at the second level until the Clear Light comes on.

Function Keys

All instructions entered at the control panel are keyed in with the function keys. Some of these keys are used in more than one way. Depending on the situation, the "I" key, for example, can be depressed to enter the number one, to give the machine a "NO" signal, or to "TYPE" one character at a time.

Once an instruction has been keyed in, depress the Start Button and the information is stored.

If an incorrect entry is made, it may be corrected by depressing the "R" Key (Rekey) on the control panel and re-entering the information. The correction must take place immediately following the incorrect entry. (Fig. 18)

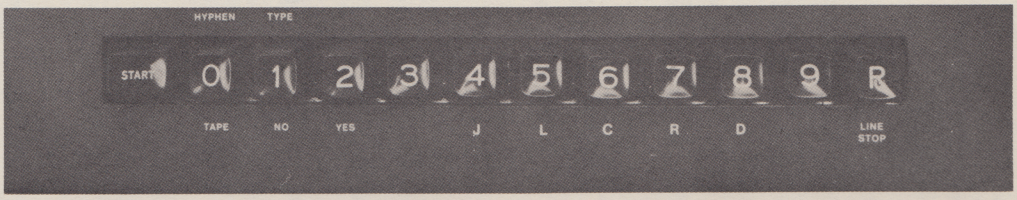


FIGURE 18 – FUNCTION KEYS

Panel Lights (Fig. 19)

A row of lights will guide you through an easily followed sequence of instruction "questions". Answers to these questions provide the machine with basic layout and setup information. Questions for layout instructions are printed in white above the lights; questions for setup instructions are printed in red below the lights. First, you will "answer" the layout instruction questions by keying in YES, NO, or a number response with the function keys. When the layout instructions are complete, the red Setup Light will come on and you will answer the setup instruction questions by other responses also entered with the function keys.

When the entire output unit has power, the Clear Light will be on. As each response is keyed in, the light advances from left to right until all layout instructions have been entered. Clear is actually the first of the layout instructions. When the appropriate information has been keyed in and the Start Button depressed, the Clear Light goes out, the next one comes on, etc.

As the red Setup Light lights up, the Leader Space Light comes on simultaneously. It is the first of the setup instructions. Once again, when the appropriate information has been entered and the Start Button depressed, the Leader Space Light goes out, the next one comes on, and the process continues until all instructions have been given.

If an incorrect entry at the Control Panel is discovered after Start has been depressed, advance through all the lights with the Start Button and enter the correct information.

When the last setup instruction has been keyed in, the Clear Light will once again light up.

Depress the Tape and Start Buttons. Tape control will take over and automatic playback begins. (Fig. 20)

There will be times when you will not have a response for every light. The information may be recorded on tape or may not be applicable to the particular project. In this case, you will simply depress Start to advance to the appropriate light.

The layout instructions are: Clear, Merge, Mode, Line Count, Measure, Line Indent, and Paragraph Indent.

The setup instructions are: Leader Space, Minimum Interword Space, Maximum Interword Space, Maximum Quad Space, Line Expand, and Dead Key.

Each of these is explained in detail in the following pages.

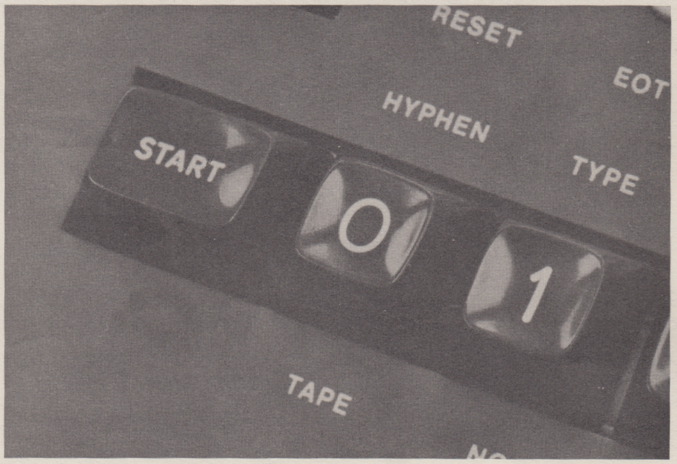


FIGURE 20 – TAPE AND START BUTTONS

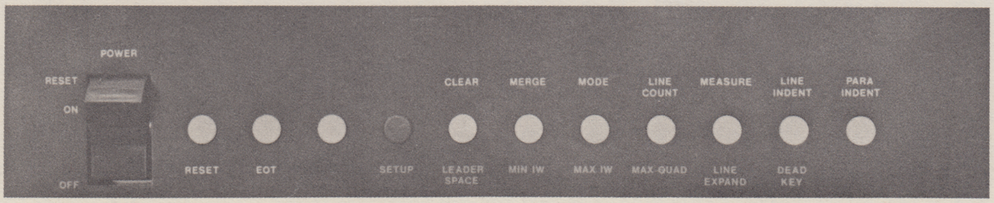


FIGURE 19 – PANEL LIGHTS

LAYOUT INSTRUCTIONS

Clear (Fig. 21)

The Clear Light question is: "Do you want to clear the machine's memory of stored information?"

ANSWER: YES or NO

At the beginning of each project, the answer will always be YES.

When Clear has been answered, depress the Start Button to store your response. The white light will advance to Merge.

When YES is entered:

1. All text in memory is cleared.
2. Merge is set to NO.
3. Line Count is restored to the last value entered.
4. Input line count is reset to zero.
5. Line Indent is set at zero.
6. All other information remains unchanged.

When NO is entered or no entry is made:

1. Text will remain in memory.
2. All instructions previously entered will remain unchanged.

DURING PLAYBACK, the machine will stop in Clear (Clear Light on) when a Stop Code is read from the tape.

The Stop Code must be recorded on tape. It cannot be entered from the Control Panel.

A Stop Code is recorded at points where Font and format changes are to be made and at the end of every project. When a Stop Code is read, printout will stop. The change you are to make appears on the recorded copy between a red "s" and a comma. For example, you may see the symbol:SPR–I,. The red "s" represents the Stop Code. "PR–I" tells you to insert a Press Roman-Italic type font. The comma ends the instruction. The symbol is strictly an instruction to you; no part of it will print on the typographic copy you are preparing.

All symbols and words between the red "s" and the comma will be ignored by the Tape Reader. Printing can be resumed only after the comma is read; therefore, if a comma should be left off the instruction, printing will begin only after the Tape Reader locates a comma. Several lines of copy could be ignored. A Correction Tape can correct the situation.

Printout will also stop when a line stop is initiated by the operator.

To stop at the end of an output line or at the end of each column in tabular format, depress the Line Stop Key momentarily.

Merge (Fig. 22)

The Merge Light question is: "Are you going to use a Correction Tape to merge lines?"

ANSWER: YES or do not answer.

If a Correction Tape is to be used, the answer must be YES.

When Merge has been answered, depress the Start Button to store your response. The light will advance to Mode.

When YES is entered, the Tape/Start sequence will cause the machine to:

1. Read through the Reference Code on the left tape and store in memory the number of the first "addressed" line.
2. Read through the Reference Code on the right tape and begin reading from that tape. When the "addressed" line is reached, the Tape Reader will bypass that line on the right tape and merge the information recorded under that Address Code on the left tape.

By answering Clear YES, Merge has been set to NO. A NO entry at the Merge Light has no effect; therefore, if no Correction Tape is being used, you may simply depress Start and go on. Merge YES or NO is effective only when Clear has been answered YES.

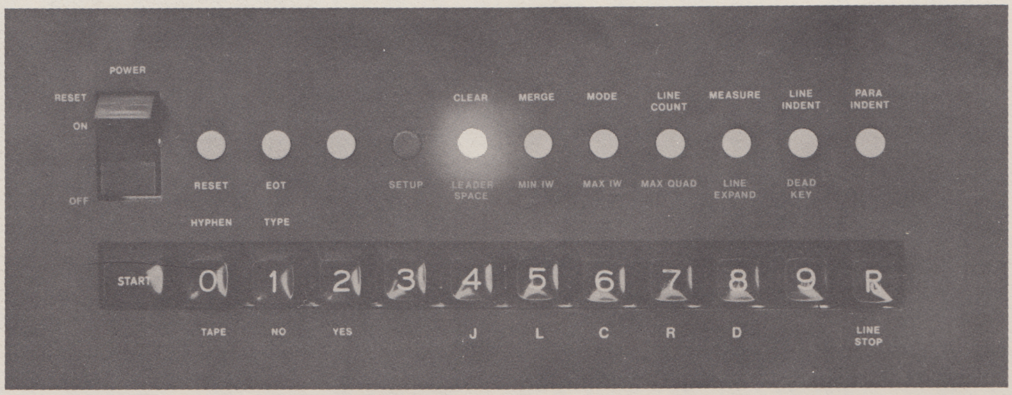


FIGURE 21 — CLEAR LIGHT

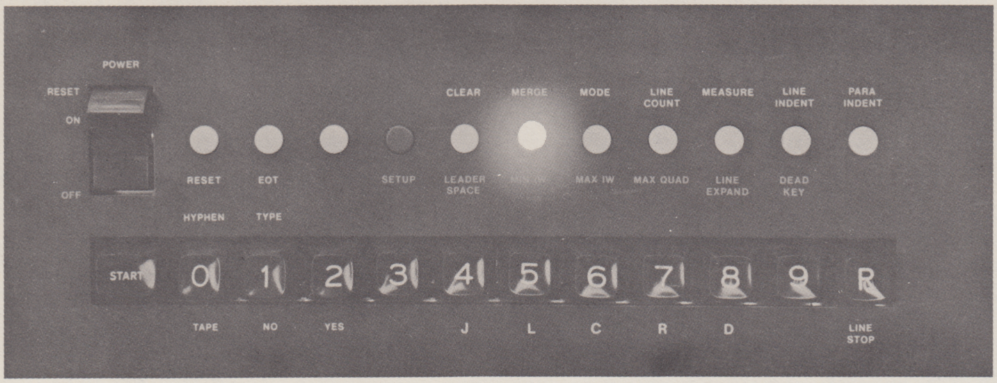

POWER
RESET
ON
OFF
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 22 – MERGE LIGHT

Mode (Fig. 23)

The Mode Light question is: "What format are you going to use for the output copy?"

ANSWER: J, L, C, R, or D.

Mode Codes may be recorded on tape or keyed in from the Control Panel. REMEMBER, RECORDED CODES OVERRIDE THOSE ENTERED FROM THE CONTROL PANEL.

When Mode has been answered, depress the Start Button to store your response. The light will advance to Line Count.

Once the mode is stored, it will remain unchanged until another mode is read from the tape or entered at the Control Panel.

A "J", "L", or "C" entry from the Control Panel produces copy identical to that produced with recorded codes.

An "R" entry from the Control Panel produces copy identical to that produced when the Flush Right Code is recorded at the beginning of a line.

However, a Flush Right Code may sometimes be recorded within a line to give copy even at both margins but broken by white space. This format cannot be produced with a Control Panel entry.

A "D" entry from the Control Panel produces copy identical to that produced when the Dot Leader Code is recorded at the beginning of a line.

However, a Dot Leader Code may also be recorded within a line, at the end of a line, at the end of a justified paragraph, or as an entire line. Copy produced from these recorded "D" Codes cannot be duplicated by a Control Panel entry.

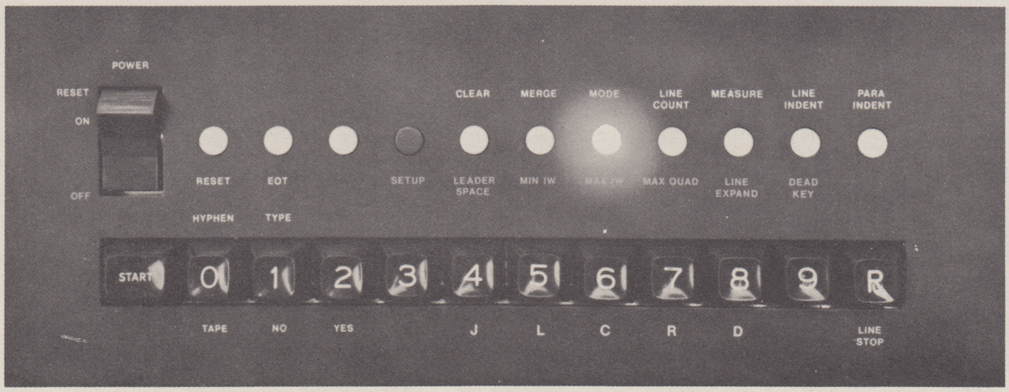

POWER
RESET
ON
OFF
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 23 – MODE LIGHT

Line Count (Fig. 24)

The Line Count question is: "How many lines of output copy do you want?"

ANSWER: A number between 1 and 32,000.

If the layout designer does not specify the number of lines, enter a large number, e.g., 1,000. There will be continuous playout.

Line Count cannot be recorded on tape; it can only be entered at the Control Panel.

When line count has been answered, depress the Start Button to store your response. The light will advance to Measure.

If Clear was answered YES, line count was restored to the last number entered.

If no line count value is entered, the last previous entry will be restored automatically.

Measure (Fig. 25)

The Measure Light question is: "What unit value do you want for the output line length?"

ANSWER: The unit value for the line length desired. The minimum is 10 and the maximum is dependent on the Precon* in use.

The Measure instruction controls the line length of the output copy which is always expressed in units.

Instead of setting margins on the output printer, line length is determined by the measure value, which can be either recorded on tape or entered from the Control Panel.

Measure can be recorded on tape or entered from the Control Panel. If the measure is recorded on tape or if a Flush Left Mode is used, no Control Panel entry is necessary.

When Measure has been answered, depress the Start Button to store your response. The light will advance to Line Indent.

Once a measure is stored, it will remain the same until another value is read from the tape or entered from the Control Panel.

*The Precon is a magnetic tape used to precondition the machine for different applications. The maximum measure varies with each condition. This is not normally a matter for concern, since the output measure desired is usually well below the maximum value allowable.

EXAMPLE

← 264 Units →

The Measure determines the unit length of the output line for Justify, Flush Right, Center, and Dot Leader Modes. It is used to set or change line length at any given point in the text material. A Measure Code must always be followed by a number and a comma. If the comma is omitted, there will be an error when the tape is played back at the output unit.

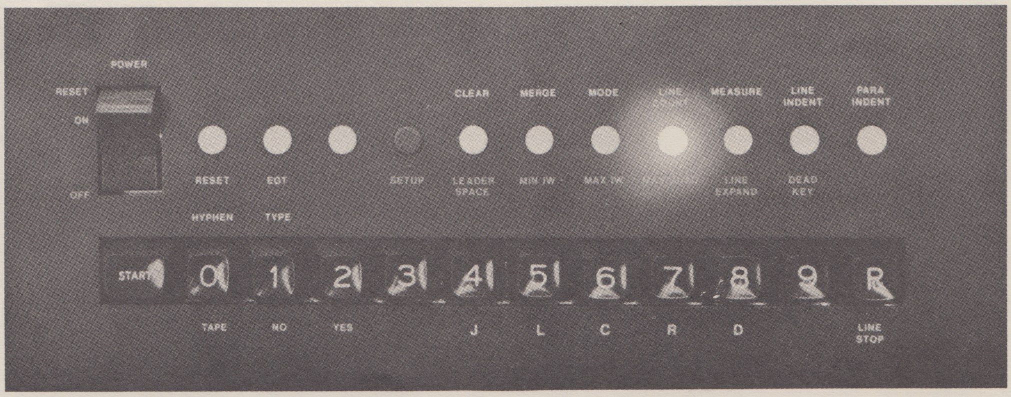
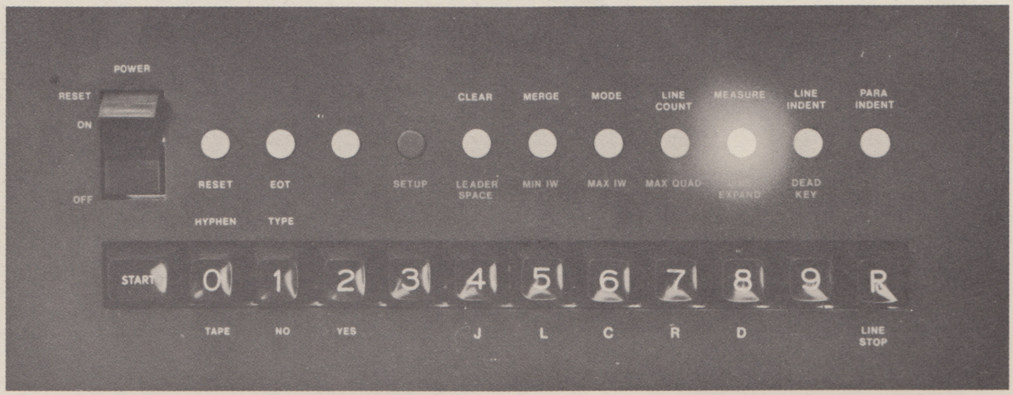

POWER
RESET
ON
OFF
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 24 — LINE COUNT LIGHT


POWER
RESET
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LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 25 — MEASURE LIGHT

Line Indent (Fig. 26)

The Line Indent question is: "How many units do you want to indent each line from the established left margin?"

ANSWER: NO or a number between 2 and 600.

The Line Indent instruction determines the number of units a series of lines is to be indented from the left margin. Line indent is used for formats such as runarounds and is not to be confused with a paragraph indentation, which will be discussed under Paragraph Indent.

The Line Indent value can be recorded on tape or entered from the Control Panel. If the Line Indent value is to be entered from the Control Panel, it will not be entered as one of the initial Control Panel entries unless the first line of your project is to be indented. Control Panel entries for this instruction will be made where the indent is to take effect.

The value entered must be considerably less than the measure.

Line Indent can be recorded on tape or entered from the Control Panel. If the line indent is recorded on tape, no Control Panel entry is necessary.

When Line Indent has been answered, depress the Start Button to store your response. The light will advance to Paragraph Indent.

If Clear was answered YES, line indent value is automatically set at zero.

Once a line indent value is stored, it remains the same until:

1. A Line Indent Code or Cancel Code is read from the tape.
2. NO is entered from the Control Panel.
3. A new entry is made.

EXAMPLE

← 264 Units →

A row of lights will guide you through an easily followed sequence of instruction "questions". Answers to these questions provide the machine with basic layout and setup information. Questions for layout instructions are printed in white above the lights; questions for setup instructions are printed in red

← 84 Units →

below the lights. First, you will "answer" the layout instruction questions by keying in YES, NO or a number response with the function keys. When the layout instructions are complete, the red Setup Light will come on and you will answer the setup instruction questions by other responses also entered with the function keys. When the entire output unit has power, the Clear Light will be on. As each response is keyed in, the light advances from left to right until all layout instructions have been entered. Clear is actually the first of the layout instructions. When the appropriate information has been keyed in and the Start Button depressed, the Clear Light goes out, the

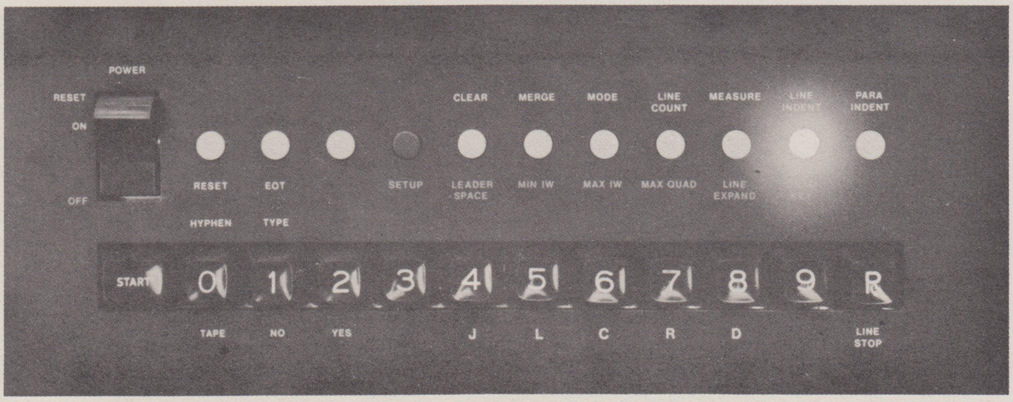


FIGURE 26 — LINE INDENT LIGHT

Paragraph Indent (Fig. 27)

The Paragraph Indent question is: "How many units is the first line of each justified paragraph to be indented?" (This instruction applies only to justified copy.)

ANSWER: NO or a number between 2 and 255.

Paragraph Indent is a layout decision which will be made at the time copy is being marked for the recording operation. A tab must be recorded where paragraphs are to be indented, but the Paragraph Indent instruction itself cannot be recorded on tape. The Paragraph Indent instruction must be entered from the Control Panel and is effective only in justified copy and only when a tab has been recorded at the beginning of the first line of each paragraph to be indented. On the output copy, the recorded tab will be converted to a space of the unit value entered at the Control Panel for the Paragraph Indent question.

The Paragraph Indent instruction is not to be confused with Line Indent, which indents a series of lines. As a matter of fact, the first of a series of lines which are being indented from the left margin may also have a Paragraph Indent when a tab has been recorded.

The value entered must be considerably less than the measure.

Paragraph Indent value cannot be recorded on tape; however, the value entered at the Control Panel will indent paragraphs only if a tab has been recorded at the beginning of the first line.

On the output copy, the tab is converted to the unit value entered.

The last value entered remains stored until a new entry is made. Therefore, if a tab is recorded on tape and no paragraph indent is wanted, NO must be entered. A Clear YES has no effect on Paragraph Indent.

When Paragraph Indent has been answered, depress the Start Button to store your response. The red Setup Light comes on, and the white light goes to Leader Space.

EXAMPLE

264 Units

12

The Measure determines the unit length of the output line for Justify, Flush Right, Center, and Dot Leader Modes. It is used to set or change the length at any given point in the text material. A Measure Code must always be followed by a number and a comma. If the comma is omitted, there will be an error when the tape is played back at the output unit.

84 Units

12

An Indent Code will automatically indent all subsequent lines a given number of units. The actual measure is not changed. The indent value must be smaller than the measure. Indents may be used for applications such as runarounds. The Indent Code must always be ended with a comma. If the comma is omitted, there will be an error when the tape is played back at the output unit.

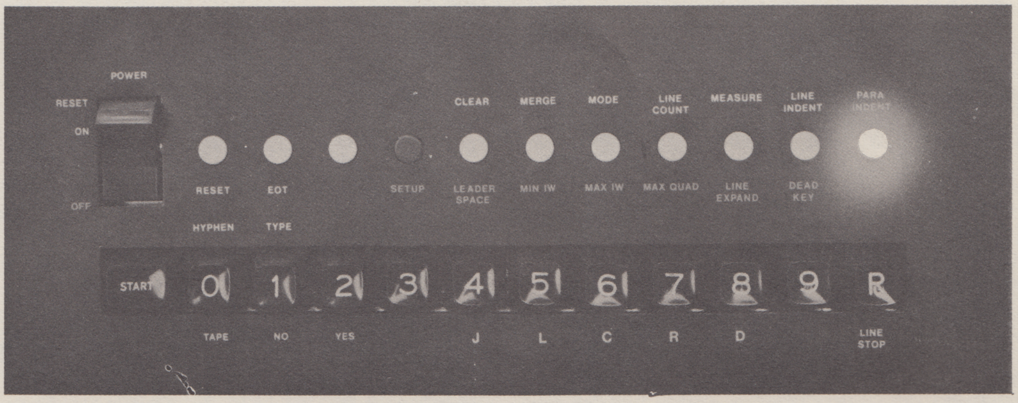


FIGURE 27 – PARAGRAPH INDENT LIGHT

SETUP INSTRUCTIONS

Setup instructions cannot be recorded on the tape. The values must be entered from the Control Panel. They remain stored until a new entry is made.

Leader Space (Fig. 28)

The Leader Space question is: "How many units will separate leader dots?"

ANSWER: A number from 3 to 255.

This question requires an answer only if dot leaders are specified.

When Leader Space has been answered, depress the Start Button and the light will advance to Minimum Interword Space.

Maximum Interword Space, Maximum Quad Space, Line Expand, and the Justification Principle

The next three setup questions affect only copy to be justified. The line length of justified copy is determined by the measure value. The output lines do not necessarily end with the recorded carrier returns of the input lines. When copy is being justified, single Carrier returns and spaces are used interchangeably. Paragraphs are identified by multiple Carrier returns or a single carrier return followed by a tab.

Justification Principle

On the MT "Selectric" Composer, copy is automatically justified by expanding the spaces between words. The number entered for Minimum Interword Space will determine the smallest space to separate words. At this point a layout decision is necessary to determine how justification is to be achieved.

Copy is justified by one sequence of steps if the copy is to be tight fitting and another sequence if copy is to have an open appearance.

Through one sequence of steps, justification is achieved by expanding space between words a limited amount and hyphenating words at the ends of lines. The other choice is to allow a greater expansion of space between words and interletter space.

To produce copy with a tight-fitting appearance, the choice is to expand space between words a limited amount and hyphenate. The limit of this space expansion is determined by the value entered for Maximum Interword Space.

To produce copy with an open appearance, the choice is to allow a greater expansion of space between words and to interletter space. The limit of space expansion in this case is determined by the value entered for Maximum Quad Space.

The sequence followed depends on the answer to the Line Expand question.

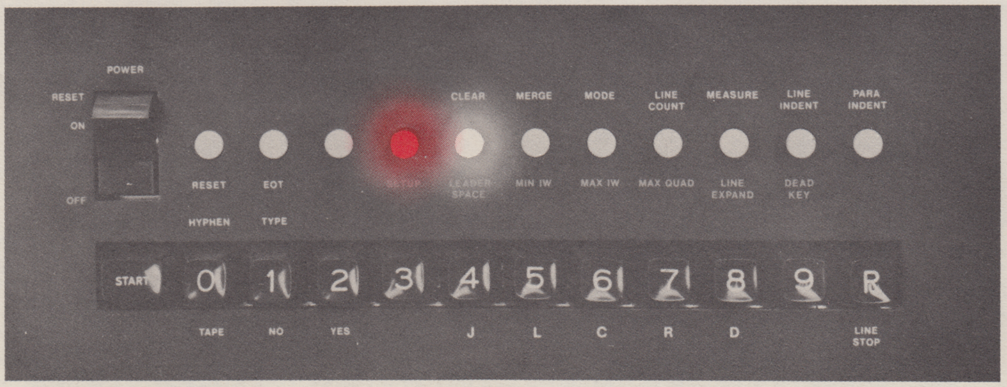


FIGURE 28 — LEADER SPACE LIGHT

Minimum Interword Space (Fig. 29)

The Minimum Interword Space question is: "What is the least amount of white space to allow between words?"

ANSWER: A number between 2 and 255.

Generally, the number entered in answer to the Minimum Interword Space question will be 3.

When Minimum Interword Space has been answered, depress the Start Button and the light will advance to Maximum Interword Space.

Maximum Interword Space (Fig. 30)

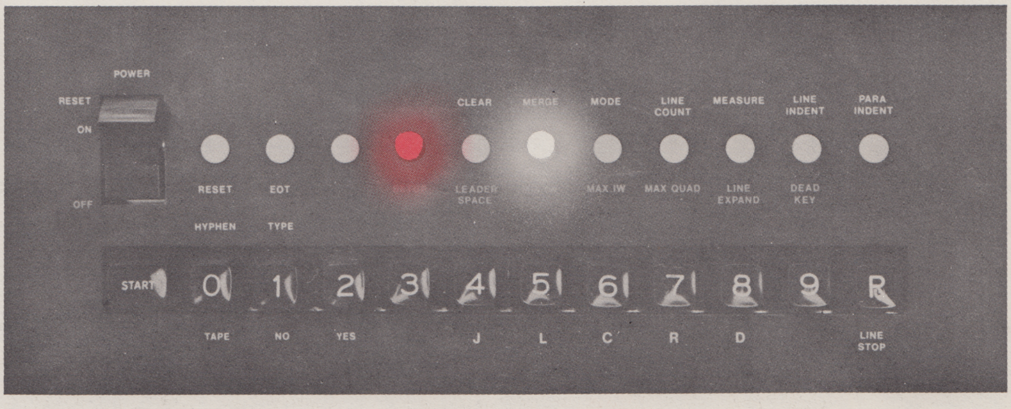
The Maximum Interword Space question is: "To what extent can interword spaces be expanded?"

ANSWER: A number between 8 and 255.

The value entered must be larger than that entered for Minimum Interword Space.

Generally, the number entered in answer to the Maximum Interword Space question will be at least 6 units more than the value entered for Minimum Interword Space.

When Maximum Interword Space has been answered, depress the Start Button, and the light will advance to Maximum Quad Space.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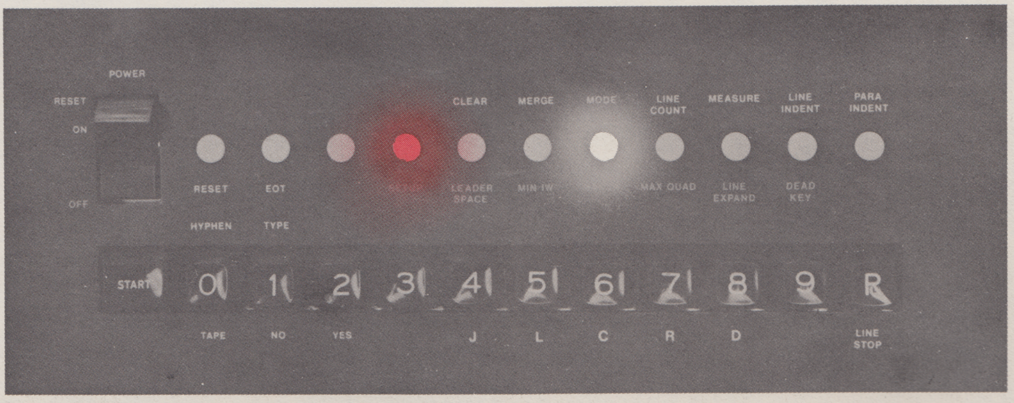
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
LEADER SPACE
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 29 – MINIMUM INTERWORD SPACE LIGHT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MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
LEADER SPACE
MIN IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 30 – MAXIMUM INTERWORD SPACE LIGHT

Maximum Quad Space (Fig. 31)

The Maximum Quad Space question is: "What is the absolute limit of space between words?"

ANSWER: A number between 9 and 255.

The value entered must be greater than that entered for Maximum Interword Space.

When Maximum Quad Space has been answered, depress the Start Button, and the light will advance to Line Expand.

Line Expand (Fig. 32)

The Line Expand question is: "Do you prefer a greater expansion of space between words and interletter space to achieve justification?"

ANSWER: YES or NO.

When YES is entered, the machine will follow this sequence to achieve justification.

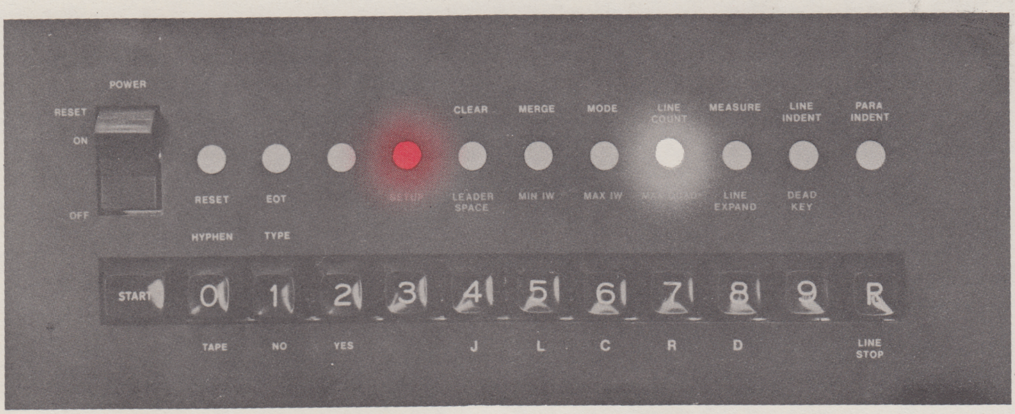
1. Expand interword space up to the maximum quad space.
2. Interletter space.

Occasionally you may have the option of hyphenating a word; however, when Line Expand is answered YES, hyphenation is rare and occurs only under very special conditions.

When NO is entered, the machine will follow this sequence to achieve justification:

1. Expand interword space up to the maximum interword space.
2. Give you the option of hyphenating a word.
3. Expand space between words up to the maximum quad space.
4. Interletter space.

When Line Expand has been answered, depress the Start Button; the light will advance to Dead Key.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MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 31 — MAXIMUM QUAD SPACE LIGHT

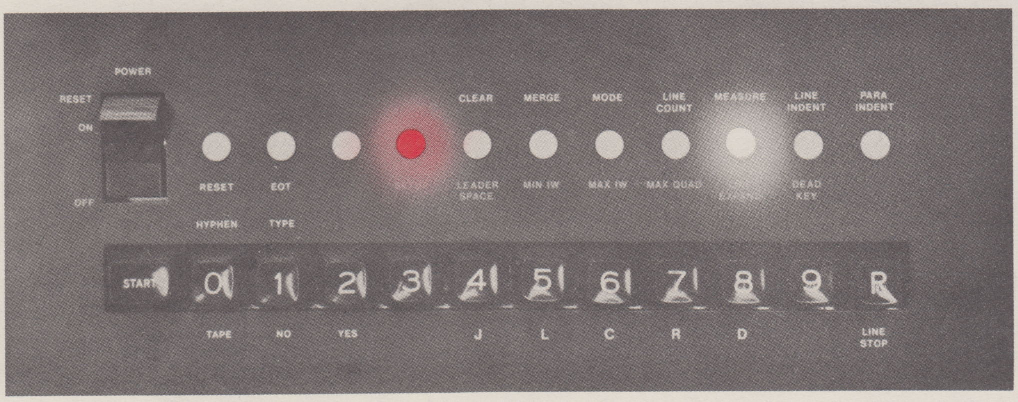

POWER
RESET
ON
OFF
CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
MIN IW
MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 32 — LINE EXPAND LIGHT

Dead Key (Fig. 33)

The Dead Key question is: "Are you using a Latin Font?"

ANSWER: YES or NO.

YES must be entered when you are using the Latin Font. In this case, you must release the Dead Key Disconnect Button on the keyboard and set the Velocity Control Dial for L.

When YES is entered and Dead Key Disconnect is released, characters (accents) in Dead Key positions will print above the next character.*

When NO is entered and Dead Key is depressed, the Carrier will move for all characters printed, and no output printer adjustments are necessary.

When Dead Key has been answered, depress the Start Button, the red Setup Light goes out, and the white light returns to Clear.

If the entire project is to be printed with a Latin Font, the Dead Key instruction may be entered with the initial setup instructions. However, if a Latin Font is used for words or phrases appearing intermittently within the project, the instruction will be entered when the machine stops for the Font change. At the Stop Code, the machine will be in Clear. You will advance to the Dead Key instruction and

1. Enter YES.
2. Release the Dead Key Disconnect.
3. Position the Velocity Control Dial at L.

When the machine stops for you to change back to a Type Font other than Latin, you will once again advance to the Dead Key instruction and

1. Enter NO.
2. Depress and lock the Dead Key Disconnect.
3. Position the Velocity Control Dial to correspond with the Font.

TAPE/START SEQUENCE (Fig. 34)

When all questions have been answered, depress the Tape Button and then the Start Button to start the machine under tape control.

The same procedure is used whether you are just beginning a project or whether the machine has stopped during operation with a layout instruction light on.

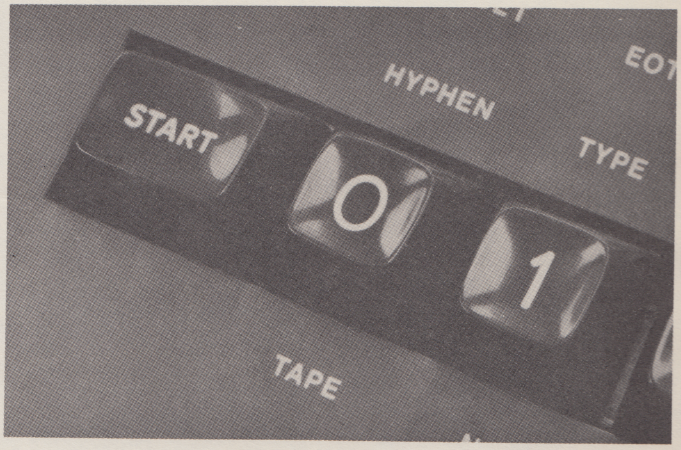
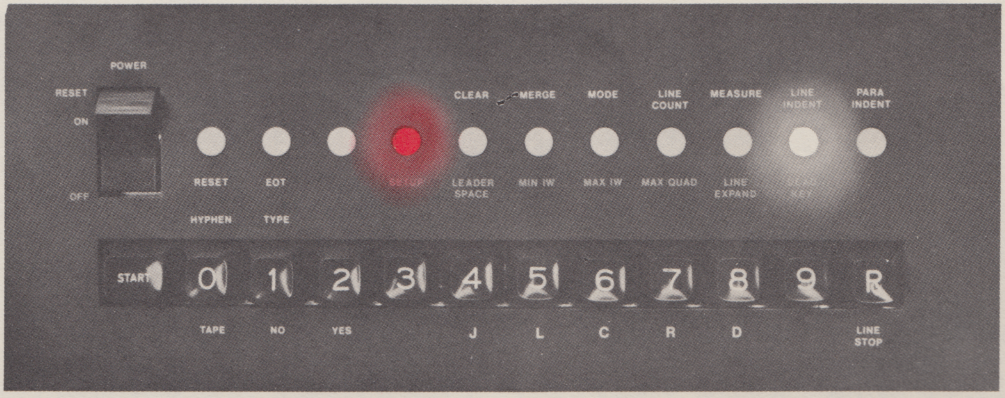

EOT
HYPHEN
START
TYPE
0
1
TAPE

FIGURE 34 – TAPE AND START BUTTONS


POWER
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ON
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CLEAR
MERGE
MODE
LINE COUNT
MEASURE
LINE INDENT
PARA INDENT
RESET
EOT
SETUP
LEADER SPACE
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MAX IW
MAX QUAD
LINE EXPAND
DEAD KEY
HYPHEN
TYPE
START
0
1
2
3
4
5
6
7
8
9
R
TAPE
NO
YES
J
L
C
R
D
LINE STOP

FIGURE 33 – DEAD KEY LIGHT

HYPHENATION

When Line Expand is answered NO, you have told the machine you would rather have words hyphenated than extra spaces between words and/or letters. To achieve justification, the machine will first interword space up to the value entered for Maximum Interword Space. If this is not enough, the next step the machine takes is hyphenation.

When the machine reads a word which overflows the measure, it automatically spaces through the measure, tabs,* and prints the word in upper case. (At this point, the machine stops and all the lights on the Control Panel are out.) Remember, the machine is reading one line ahead of the printing line, so that the word printed in upper case is from the next output line.

A parenthesis appears in the printed word. The word MUST be hyphenated to the left of, or at the point of, the parenthesis. (To avoid interletter spacing, the word should be broken as close to the parenthesis as possible.) You decide where to hyphenate the word.

* When Line Expand is answered NO, always set a tab stop to the right of your page for the print-out of words to be hyphenated.

EXAMPLE OF OUTPUT REQUIRING HYPHENATION DECISIONS

With each impression, the IBM "Selectric" Composer sets a new level of type quality. It produces distinctive type that improves the appearance of all budget work and permits you to produce many quality jobs with greater economy. Every job is notable for precise alignment, superb letter fit and uniform color and density far surpassing the traditional limits of direct impression typography. This outstanding type quality is made possible by the unique printing action of the IBM Composer Type Font, an easily handled, conveniently stored element based on the "Selectric" typing principle.

UNIF)ORM UNI–

TYPOG)RAPHY' TYPOG–

HANDLE)D' HAN–

Dividing a Word

Print out one character at a time by depressing the TYPE Key—one depression for each character. This printout is to the right of the word printed in upper case. When you have reached the point where you want to divide the word, depress the HYPHEN Key on the Control Panel. This causes the hyphen to print, instructing the machine where to hyphenate the word in justifying the next line. Then depress the Start Button and printing will continue. The divided word will print at the end of the next output line. (Fig. 35)

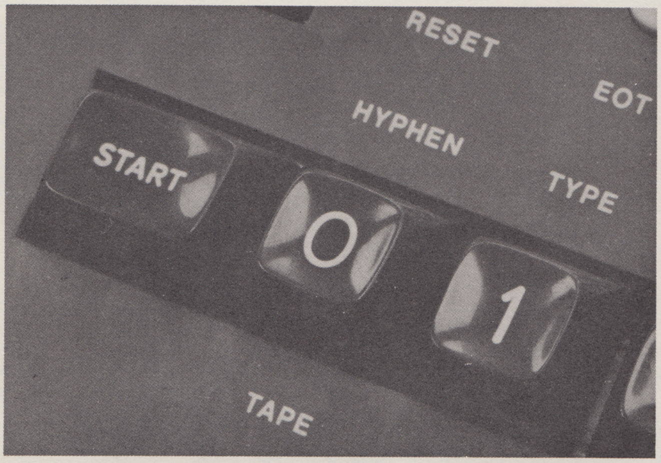

FIGURE 35 — HYPHEN KEY

If the word printed in upper case already contains a hyphen (such as in mother-in-law), it should be divided after the hyphen. By depressing the TYPE Key, print out the first word AND THE HYPHEN. Do not insert another hyphen by depressing the HYPHEN Key. Instead, depress the Start Button; the machine will continue printing.

Any error made while "printing out" the word for hyphenation (e.g., printing past the parenthesis or past the desired hyphenation point) can be corrected by depressing the R Key on the Control Panel. This gives you the opportunity to start again by printing out each character as though the word had just been printed in upper case for hyphenation.

When you depress the Start Button, if the Carrier spaces one time and stops, this indicates that the hyphen was inserted to the RIGHT of the parenthesis. You must start again printing out each character as though the word had just been printed in upper case for hyphenation.

Rejecting Hyphenation

Sometimes you may not be able to hyphenate a word because the parenthesis does not appear at a suitable dividing point or the word has only one syllable. So, depress the Start Button and the machine will justify the next line by expanding the interword spacing up to the value entered for Maximum Quad and, if necessary, interletter space. The word which could not be hyphenated will be held in memory and printed at the beginning of the following line.

LINE STOP

When text is printing out from the tape, the R Key on the Control Panel becomes the Line Stop Key. When this key is depressed, printing will stop after the last line stored in the memory has printed. When printing stops, the Control Panel Clear Light will be on. (Fig. 36)

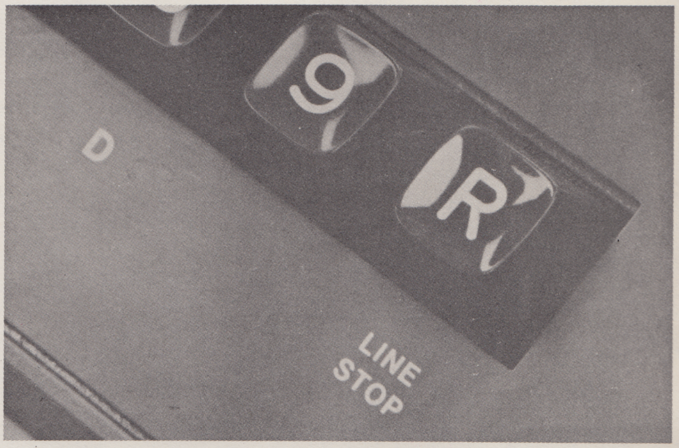

FIGURE 36 — LINE STOP/R KEY

When printing tabular material, depressing the Line Stop Button will cause a stop at the end of a column which is not necessarily the end of a line. When printing non-tabular material, depressing the Line Stop Button will always cause a stop at the end of an output line. (Generally, the machine will continue printing the present line and the following line which has already been read into memory.)

Line Stop is used to enter new information at the Control Panel or to change Type Fonts, escapement, leading, etc., when a Stop Code has not been recorded on tape.

As the name implies, Line Stop is a COMPLETE LINE control. If a Font change is required for one or more words in the MIDDLE of a line, a Stop Code MUST have been recorded.

When your machine has stopped in Clear after depressing Line Stop and you want to play back a single line at a time, press Line Stop again before beginning the Tape/Start sequence and you are assured of single-line playout. Follow the same procedure for EACH line of single-line playout. This is an especially useful procedure when you near the end of a page and wish to control page-end playout.

SELF-APPRAISAL TEST – SECTION III

1. Name the three basic components of the MT/SC system.

Answer: ____________________ ____________________ ____________________

TRUE OR FALSE

2. When clear has been answered YES, all text in memory is cleared, merge is set to NO, line indent is reset to "0".

Answer: __________

3. A line count value may be recorded on tape.

Answer: __________

4. The line indent value may be recorded on tape.

Answer: __________

5. If line expand is answered NO the machine will give you the option of hyphenating a word before it begins interletter spacing.

Answer: __________

ANSWERS

1. Tape reader, control panel, composer
2. True
3. False
4. True
5. True

PRE-SCHOOL TEST

The following is a test on the pre-school material. The next two pages show examples of output copy desired. It will be necessary for you to mark up the typed copy on the pages following, from the information on the layout example. This marked copy will then be used to generate a coded magnetic tape. This tape must be recorded by you or under your direct supervision.
YOU WILL THEN BE REQUIRED TO BRING THIS TAPE WITH YOU TO SCHOOL AS IT WILL BE USED AS A PART OF YOUR GRADE.

LAYOUT EXAMPLE

MT/SC DEMONSTRATION

This is a demonstration of the Magnetic Tape "Selectric" Composer. The tape we are using has been prepared on a Model V MT/ST. At the beginning of this tape a Prefix Code (same character configuration as an MT/ST Stop Code) was recorded followed by the letter "L". This instruction tells the MT/SC to run in a "flush left" mode.

We are now justifying copy on a line length of 240 units. You will notice that the line endings do not correspond to the original hard copy but are determined by the number of character values it takes to make up a 240 unit line including spaces.

240 Units

Interletter spacing will immediately occur with the reduced measure. This is basically a newspaper column measure. It is apparent that the typographic quality is definitely reduced because justification is more difficult to accomplish as we work with fewer spaces on each line.

160 Units

This is called a "Flush right" mode of operation. The line measure (length) is 300 units but we are spacing in from the left hand margin as many units as are necessary to print the line with even right hand margins. You may recall that during the original setup we answered the keyboard question "Leader space" by keying in a "3". We were telling the machine to leave 3 units of space between any leader dots which were to be printed.

300 Units

LAYOUT EXAMPLE

300 Units

. . . . We are now leadering with dots preceeding the
. . . . .printed copy. The "D" which we recorded
. . . . .causes the MT/SC to in effect justify the line
. . . . by filling the space between the left hand
. . . . margin and the printer copy with dots. These
. . . . dots are evenly spaced 3 units apart.

Now we are centering the recorded text line
for line as recorded. It is being centered
within the limits of our 360 unit measure.
Of course centering looks much better if
shorter sentences are recorded like this:
The Magnetic Tape
"Selectric" Composer
is a product of
IBM

Fixed Spaces

180 Units

The MT/SC also has the capability to do "run around" - in other words, leave a space within the printed text for the insertion of illustrations, pictures etc. We can do a left hand run around by reducing the measure by the number of units we wish the run around to be.

360 Units

Now we are still justifying copy but our line length (measure) has been reduced by 100 units. We will continue in this mode for a few lines, then go back to our original measure of 360 and program an indent of 100 units from the left hand margin which will give us a right hand run around.

260 Units

As you will see after a few lines have printed, our line length is still the same as the paragraph above. We are still in our 360 unit measure but we are indenting in from the left margin 100 units on each printed line.

100 Units

This is the end of our demonstration. We hope you have acquired a better understanding of the basic functions which can be done by the Magnetic Tape "Selectric" Composer.

360 Units

MT/SC DEMONSTRATION

This is a demonstration of the Magnetic Tape "Selectric" Composer. The tape we are using has been prepared on a Model V MT/ST. At the beginning of this tape a Prefix Code (same character configuration as an MT/ST Stop Code) was recorded followed by the letter "L". This instruction tells the MT/SC to run in a "flush left" mode.

We are now justifying copy on a line length of 240 units. You will notice that the line endings do not correspond to the original hard copy but are determined by the number of character values that it takes to make up a 240 unit line including spaces.

Interletter spacing will immediately occur with the reduced measure. This is basically a newspaper column measure. It is apparent that the typographic quality is definitely reduced because justification is more difficult to accomplish as we work with fewer spaces on each line.

This is called a "Flush right" mode of operation. The line measure (length) is 300 units but we are spacing in from the left hand margin as many units as are necessary to print the line with even right hand margins. You may recall that during the original setup we answered the keyboard question "Leader space" by keying in a "3". We were telling the machine to leave 3 units of space between any leader dots which were to be printed.

COPY TO BE MARKED

We are now leadering with dots preceeding the printed copy. The ''D'' which we recorded causes the MT/SC to in effect justify the line by filling the space between the left hand margin and the printer copy with dots. These dots are evenly spaced 3 units apart.

Now we are centering the recorded text line for line as recorded. It is being centered within the limits of our 360 unit measure. Of course centering looks much better if shorter sentences are recorded like this:
The Magnetic Tape
''Selectric'' Composer
is a product of
IBM

The MT/SC also has the capability to do ''run around'' - in other words, leave a space within the printed text for the insertion of illustrations, pictures, etc. We can do a left hand run around by reducing the measure by the number of units we wish the run around to be.

Now we are still justifying copy but our line length (measure) has been reduced by 100 units. We will continue in this mode for a few lines, then go back to our original measure of 360 and program an indent of 100 units from the left hand margin which will give us a right hand run around.

As you will see after a few lines have printed, our line length is still the same as the paragraph above. We are still in our 360 unit measure but we are indenting in from the left margin 100 units on each printed line.

This is the end of our demonstration. We hope you have acquired a better understanding of the basic functions which can be done by the Magnetic Tape ''Selectric'' Composer.

To familiarize you with the operation of the MT/SC system, we will use the tape you have just recorded. You may use Section III of this manual in conjunction with the set-up instructions below to produce your output copy.

Set the leading dial to correspond to the type font you are using.

Set escapement lever to correspond to the type font you are using.

INITIAL CONTROL PANEL ENTRIES

CLEAR	MERGE	MODE	LINE COUNT	MEASURE	LINE INDENT	PARA INDENT
YES	NO	*	100	*	*	NO
3	3	9	12	YES	NO	
Ldr. Space	Min. iw Space	Max, iw Space	Max. Quad Space	Line Expand	Dead Key	

SPECIAL INSTRUCTIONS

*Depress start button to advance to the next question as this information should be recorded on tape and no answer is needed.